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ABSTRACT

The ten articles in this volume focus on the challenges of reading in the 1980s. Specific topics discussed in the articles include (1) the freely selected books of fourth and sixth grade students, (2) a student author project that served to integrate the language arts, (3) communication apprehension and its implications for communication instruction, (4) lifelong reading, (5) new trends in teaching reading comprehension, (6) recent research in second language acquisition and its implications for instruction, (7) the musical cloze procedure for language development, (8) reading in the physical education curriculum, (9) prereading strategies for content areas, and (10) an evaluative process for content textbooks. (FL)

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READING: A NEW DECADE AND A NEW CHALLENGE

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VOLUME 3

Third Yearbook of the Arizona State University
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CONTENTS

Page

FOREWORD iv

A STUDY OF THE FREELY-SELECTED BOOKS BY FOURTH AND SIXTH GRADE CHILDREN
Gary Anderson
Mary Ann Lawson. 1

A STUDENT AUTHOR PROJECT: INTEGRATING LANGUAGE ARTS
Daniel L. Clavio 11

THE CASE OF COMMUNICATION APPREHENSION: SOME IMPLICATIONS FOR COMMUNICATION INSTRUCTION
William G. Davey 19

TOWARD LIFELONG READING
Raymond J. Duquette. 32

NEW TRENDS IN TEACHING READING COMPREHENSION: RESEARCH AND APPLICATION
Maryann Eeds 36

RECENT RESEARCH IN SECOND LANGUAGE ACQUISITION AND IMPLICATIONS FOR INSTRUCTION
Sarah Hudelson 49

THE MUSICAL CLOZE PROCEDURE (MCP) FOR LANGUAGE DEVELOPMENT
John A. Mateja
Virginia Pesqueira 59

ANOTHER CHALLENGE: READING IN THE PHYSICAL EDUCATION CURRICULUM
Berta Parrish. 66

PRE-READING STRATEGIES FOR CONTENT AREAS
John E. Readence 77

AN EVALUATIVE PROCESS FOR CONTENT TEXTBOOKS
Keith J. Thomas. 90

FOREWORD

OUTLOOK FOR THE 80'S*

As we begin a new decade with this Third Annual Proceedings, it is an opportune time to take a few minutes to look ahead to some challenges facing reading educators in the 1980's. Predicting challenges is always risky since the predictor assumes a role unfamiliar to most of us. However, there is some safety in making a prediction because rarely is the predictor held accountable. Who can remember a prediction of Jean Dixon's which did not come to pass?

Predictions, then, for the decade of the 1980's will probably be as accurate as those in the beginning of the decade of the 70's. But simply taking time to make a few predictions is an exercise in optimism, an exercise necessary for keeping our sanity and perspective in the today's world of education. Some people, looking to the coming decade, remain gloomy. Dr. Christopher Dede, President of the Education Section, World Future Society, made this comment regarding the future of reading instruction:

> Schools will survive . . . but things that can be taught by machine--like reading and math, limited responses--(underlined for emphasis) they'll be taught at home . . . . (p. 43)

As someone vitally interested in the way we are teaching reading in schools, let me present three predictions which I also view as major challenges to all of us in the 1980's. Hopefully, they will be a bit more optimistic than Dr. Dede's. By calling your attention to them I hope you will also regard them as critical challenges and issues over the next decade.

1. The current emphasis on reading and management systems for reading instruction will reach its peak as local funds begin to dictate drastic economy measures in basic instructional programs. What will replace reading and management systems, however, is not so clear.

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*Introduction to Annual Proceedings of the Arizona State University Reading Conference, 1980

2. As funding becomes a critical issue for compensatory programs, Title I programs will be challenged to lead the way into creative uses of those funds made available for compensatory education. The critical issue here will be the conflict between regulations (we can't do that) and curriculum (what's best for kids). The challenge to Title I personnel will be to develop some new and exciting ways to bridge that gap while at the same time improving coordination with the regular classroom program, already a serious problem in many schools.

3. Computers, calculators, and television will invade the reading class and become new tools of reading instruction.

First, I think we can say with some degree of certainty that we will see an end to the current overemphasis on reading systems and on management systems associated with reading instruction. No one ever said teaching reading was going to be efficient. Making ball bearings, yes, but not putting different kinds of kids with different kinds of print together in the same room! Sterl Artley, whose contributions to the field of reading education span several decades , wrote eloquently about this issue in a recent journal article:

> Without realizing what would ultimately take place we have been walking the road of performance objectives, mastery teaching, and back-to-basics under the false assumption that if readers demonstrate the mastery of skills, ipso facto they will be effective readers. We have measured children's progress by tests rather than by the extent to which they read and enjoy reading. We have made reading less interesting and more of a task to be learned, with the result for many children, 'reading just isn't any fun.' (p. 549)

Artley, interestingly, chose to publish his article in Language Arts, the journal of the National Council of Teachers of English, and not in a professional journal devoted primarily to reading education. He sees, quite clearly, that skills sequences are not scientifically derived, rather arm-chaired, packaged as valid and reliable systems for teaching reading, and to which management systems are added so teachers may then "deliver" reading instruction to students. All this sounds great, again, for ball bearings, but hardly relevant to reading instruction, especially if our goal is to help students learn to use reading as a communication tool.

Second, let's take a look at our prediction regarding Title I and its role in the next decade. Is Title I working? Will it really play such a crucial role in the 1980's? Yes, to both questions. Title I is working. In some places, naturally, it works better than others, but it is working in its 15th year of implementation. What we can anticipate in the 1980's is Title I being asked to do more and more in leading the way with innovations in programs for compensatory education. This seems logical considering its senior status as a major compensatory program. Title I teachers have years more experience in how to use federal funds than most any other educators. So, they will fall heir to the challenge of finding more creative ways to solve the problems of compensatory education in the face of shrinking funding. The first problem, that of coordination with regular classroom instruction, is probably the most serious. I suggest we approach this problem, not as an educational one, but rather as a public relations problem. Its solution lies in getting accurate information about Title I to all those personnel in schools where Title I programs exist. The dispelling of common myths about Title I should be our goal, and public relation tactics our means of dispelling those myths. Quite simply, we must find ways to prevent a principal who is unfamiliar with the Title I program in the building being asked questions by regular classroom teachers who also are largely ignorant of the program. This compounded ignorance has caused, in the past in many schools, much friction and tension. Faced with the increased demand for compensatory services and shrinking funding, we can no longer afford this situation to exist in schools with Title I programs.

One district in Arizona is considering some ways through staff development of keeping regular classroom teachers fully informed about the Title I program. During the first few weeks of the school year, each classroom teacher who sends students to a Title I program will be relieved by a substitute teacher and spend a full day in the Title I room. In addition to observing the on-going educational program, each visiting teacher will be briefed concerning the details of the approved Title I proposal. Through this program of first hand information, transmitted to everyone concerned with Title I, it is hoped that misconceptions can be caught before they become widespread among the school staff. The building principal would participate in the Title I program for longer periods of time, scattered throughout the school year so that a full year long picture of the total Title I program is presented. Armed with this type of base line information, a giant step should have been

taken toward improving coordination between the regular school program and the Title I support program. It is this type of creative thinking which my second prediction is intended to foster.

Finally, computers, calculators, and television will invade the reading class and become tools of the reading teacher. Notice I have not said we will use these tools to teach reading, an idea which like a better mousetrap still has a few problems. This prediction will offer us a critical challenge for the 1980's for the quite simple reason that our students will need to utilize, as part of everyday living, either separately or in combination, information obtainable only by using computers, calculators, and television before the end of this decade. There will scarcely be a job by the end of the 80's in which either one or all of these electronic communication tools will not be an integral part, from teaching to gas station attendant, lawyer, doctor, priest, bricklayer. Put simply, our students will need to use these tools as a functional part of daily life. What we will do is to teach students to use these tools as part of general communication. These three, computers, calculators, and television, will join with print as part of the army of tools available to our students as they communicate in the world of the 80's and beyond. To leave this instruction to math educators alone will simply not do as these tools go far beyond numbers. They are sophisticated, increasing affordable, sources of vital information and are needed to help our society function. As a first step we must demand that the materials we use to teach reading contain stories which depict real people using computers, calculators, and television as part of their daily lives. From there we must begin to make these electronic tools available in each and every classroom so teachers can begin to show students how to use them, just as we are trying to show our students how to use print as a means of communication.

A challenge, you bet! But, fear not for print. It is alive and well. The information offered to our students through print gives them communication power, having more information available through electronic means only increases the ability of our students to communicate effectively in an increasingly complex world.

So, there you have my predictions in the form of challenges for the 1980's. As you read them and the articles which follow in this volume, perhaps you can make a few predictions of your own. But be certain you write them down and store them in a safe place, because in 1990 I am going to review mine as you should yours to

see how accurate (or inaccurate) we were at predicting the future. Remember, if I am accountable, so are you! Now, on to the challenges of the 1980's. . . . . .

Lyndon W. Searfoss

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A STUDY OF THE FREELY-SELECTED BOOKS BY FOURTH AND SIXTH GRADE CHILDREN

Gary Anderson
Mary Ann Lawson
Arizona State University

The Problem

"If only we could get them to read" is a plea which has been made by teachers, librarians and parents. In order to "get them to read," we must first know what children will want to read. If we provide books of interest to children, hopefully reading will become a lifetime habit.

The purposes of this study were to determine what books children freely select to read for enjoyment and to monitor the degree to which children complete their selections.

Much research has been done on the reading interests and preferences of intermediate grade children. This research, however, has been difficult to interpret and apply because of the various procedures used to collect the information and the inconsistency of the findings. A brief review of reading interest research since 1970 will illustrate the point.

Ashley's (1970) work included 900 children in grades four through seven. Children listed their first three choices of reading topics. Mysteries were most popular with boys and girls followed by adventure, ghost stories, comics, science fiction, horses, real animals, jokes and human relations.

In his doctoral dissertation in 1971, Downen reported that boys in grades three through five were interested in adventure, tall tales, historical non-fiction, sports and science while girls preferred animal stories, modern fantasy and stories about children.

In a study which included 695 fifth graders from Arkansas, Lawson (1972) reported that animal, mystery, ghost, fantasy, science fiction and sports were of primary interest.

Lian-Hwang Chiu (1973) used a questionnaire to determine reading preferences of fourth grade children. He

reported that boys preferred sports, biography, mystery, social studies while girls liked mystery, humor, adventure and biography.

Lauritzen did an informal study, published in 1974, using a reading interest form. The study found that 9-year-old boys preferred human, imaginary literature, and animal stories. Girls liked animal stories, mysteries, and stories about people. Mystery and animal stories were the favorites of 11-year-old boys and girls.

Jerry Johns (1975) investigated the reading preferences of inner-city children in grades four through six. Using a questionnaire with illustrations and descriptions from modern fiction trade books, he reported that urban children preferred books which depicted middle class settings and characters with positive self-concepts.

Mysteries and animal stories appeared to be a favorite of both boys and girls in most of these studies. Boys preferred sports, tall tales and biographies while girls liked stories about people, humor and fantasy. A limitation in interpreting and comparing these studies is due in part to the research methods used to collect data. In some studies, children completed questionnaires, in others they completed open ended sentences, selected from among book titles, or chose pictures of books they thought they would like to read. The present study used a record of the books the children actually began reading over a four-week time period.

Procedure

All the students in the fourth and sixth grades at four elementary schools in Tempe, Arizona, participated in the study. The total study population numbered 476 children, including 232 fourth graders and 244 sixth graders. The study was conducted over a 5 week period, from late October to early December, 1978.

The children recorded their free reading activity on a "free reading log." Each week a new log was distributed and the previous log was collected. The children recorded the following information: Title of each book started, author, where they got the book, number of pages in the book, number of pages read, the date the book was started and the date the child stopped or finished reading the book.

Free Reading Log

Week of _____

Name _____ Grade _____ Age _____ Boy or Girl _____

School _____ Teacher _____ Room _____

Fill in Columns 1, 2 and 3 When You Begin a Book

Fill in 4-7 When You Stop or Finish the Book

1	2	3	4	5	6	7
Copy the exact title of the book. ↓	Who wrote this book? Author ↓	Date you started reading this book. ↓	Date you stopped reading this book. ↓	Write the number of the last page you read. ↓	Write the number of pages in the book. ↓	Circle-Write where you got the book. ↓
						Public Library School Library Home

The information on the logs collected the first week was not included in the study. The researchers had the opportunity to review the log format and to insure instructions were understood and followed by the students. Information recorded on the logs for the next month became the primary source of data for the study. At the end of the fifth week, after the final log was collected, the students completed a one-page questionnaire about their reading preferences and influences on their free reading selections.

As the logs were collected each week, all entries were inspected for completeness and legibility. Entries with missing or illegible information were eliminated from the study. If a child started but did not complete, or stopped reading a book in one week, it would be entered on the subsequent weekly log. Nineteen hundred usable entries became the basis of the study.

Each log entry was assigned to one of 11 content categories. When titles were unknown reference books for children's literature were consulted. The books were assigned to only one category, even though elements of several categories might occur within the book. The judgment regarding category assignment was based on the predominant theme of the book. The categories and examples are:

1. adventure-mystery: Books with excitement, elements of risk and danger, the solving of the unknown (e.g., The Secret of Phantom Lake, The Adventures of Tom Sawyer);

2. believable animal: Books about realistic animals (e.g., The Black Stallion, Lassie Come Home);

3. make-believe animal: Books about fantasy animals (e.g., Bambi, Winnie the Pooh);

4. humor: Books of jokes, riddles and cartoons (e.g., Snoopy, Dennis the Menace);

5. historical biography: Books about people who achieved fame or renown prior to World War II (e.g., The Story of Pocahantas, George Washington);

6. contemporary biography: Books about people who achieved fame or renown after World War II (e.g., Bruce Jenner, Franco Harris, Bill Cosby);

7. tall tales and fantasy: Books containing elements and characters that are not real; fairy

tales, ghost stories, fanciful tales (e.g., Gulliver's Travels, Mary Poppins);

8. sports: Books that are both fiction and non-fiction sports stories (e.g., Great Quarterbacks of Pro-Football, The Baja Run);

9. information: Books about factual information such as hobbies, science, other countries, animals, plants, minerals, including how-to and I-want-to-be books (e.g., Life in Rural America, You Will Go to the Moon);

10. human relations: Books that primarily deal with working through problems with self, peers, siblings, parents, and teachers around such problems as money, social status, belonging, growing up, etc. (e.g., Little House on the Prairie, Homer Price);

11. other: Books that do not fit into the other categories, for example, poetry, plays, Bible stories, holidays (e.g., The Twelve Days of Christmas, Bible Stories).

The variables examined in this study of free reading were:

1. the grade level of the subjects,

2. the sex of the subjects,

3. the content categories of the books,

4. the degree of reading completion of the books.

It is important to note that part of the log entry--title, author, date started--was recorded by the child when the book was first started. The assumption is that something about the book caused the child to want at least to begin reading it. If the child did not complete the book, the assumption is the book was not interesting or may have been too difficult for that child at that time.

The data taken from the logs for analysis included information about the subjects (grade, sex and school) and information about each book entry (content category and the degree of completion).

Results

The 476 fourth and sixth grade children began reading 1900 books during the 4 weeks the data was collected. The fourth graders began 933 books and the sixth graders 967. On the average, each fourth grader started 4.02 books and each sixth grader 3.96 books during the 4 weeks. Overall, the children completed 1391 of the books they started reading, for a 73% completion rate. Among the fourth graders, the completion rate was 70%; among the sixth graders it was 76%. While the fourth and sixth grade girls started and finished reading more books than the boys, their completion rate, 74%, was very similar to that of the boys, 72%. Table 1 details the information.

Table 1

Degree of Completion Among Fourth and Sixth Grade Boys and Girls

	Books Started	Read Less Than Half	Read More Than Half	Books Completed	Percent Completion
Fourth					
Boys	395	51	59	285	72%
Girls	538	109	64	365	68%
Sixth					
Boys	411	55	58	298	73%
Girls	556	63	50	443	80%
Total	1900	278	231	1391	73%

The content classification of the books was examined to determine specific reading interests. Books classified as tall-tale and fantasy were started more frequently than books in any other category. They made up

22% of the 1900 books started. The next most frequently started category of books was that classified as human relations. These books made up 18% of all those started. The third and fourth most popular categories, information and adventure-mystery, each made up 13% of the 1900 books started. These four categories accounted for 67% of all the books started by all children. Table 2 details the number and percent of starts, completions and percent of completion for each category.

Table 2

Books Started and Completed by Category

	Started		Completed		
	Number	% of Total	Number	% of Total	Percent Completion
Tall Tale-Fantasy	436	23%*	308	22%*	71%*
Human Relations	337	18%	238	17%	71%
Information	254	13%	179	13%	70%
Adventure-Mystery	244	13%	187	13%	77%
Humor	172	9%	145	10%	84%
Animals-Believable	135	7%	88	6%	65%
Animals-Fantasy	117	6%	88	6%	75%
Sports	99	5%	75	5%	76%
Biography-Historical	44	2%	37	3%	84%
Biography-Contemporary	36	2%	26	2%	72%
Other	26	1%	20	1%	77%
Totals	1900		1391		73%

*percent rounded off

Table 2 indicates that some categories of books are much more likely to be selected for free reading than are others by fourth and sixth graders. It does not, however, indicate that particular categories have markedly greater or less "holding power" than other categories. The two categories completed with greatest frequency were humor and historical biography, with an 84% completion rate. The least frequently completed category of books was animals-believable, with a 65% completion rate.

The preceding includes the data for both fourth and sixth grade boys and girls. A different reading pattern emerges, however, when the data is examined by sex and grade level. While some categories of book selection were unique to grade level, others were unique to sex. Only one category, tall tale and fantasy, was popular with both boys and girls in fourth and sixth grades. The category of particular interest to girls was human relations. Books in this category made up 26% of all the books started by both the fourth and sixth grade girls. The boys, on the other hand, selected information books. The latter category made up 25% and 21% of all the books started by the fourth and sixth grade boys, respectively. They also selected sports books, while the girls did not. Sports books, however, accounted for only about 11% of all the books selected by boys.

Table 3 details the percent of total book starts by the boys and girls at the fourth and sixth grade level.

While Table 3 indicates disagreement among fourth grade boys and girls on human relations and information categories, there is relative agreement and interest in the tall tales and fantasy category and the humor category. There is a uniform lack of interest in selecting biographies and believable animal books. Among the sixth graders there is agreement and interest in tall tale and fantasy books and adventure-mystery books. Sixth graders also showed uniform lack of interest in selecting books categorized as historical or contemporary biography, and animal-fantasy books.

Summary

Four categories of books, tall tales and fantasy, human relations, information and adventure-mystery, accounted for 67% of all the books read by the children. As it is important to provide books that children want to read, parents and teachers may want to have books from these categories available for children.

Table 3

Percent of Total Starts in Each Category
by Grade Level and Sex

	Fourth		Sixth	
	Male	Female	Male	Female
Tall Tales-Fantasy	21%	25%	20%	24%
Human Relations	7%	26%	7%	26%
Information	25%	6%	21%	7%
Adventure-Mystery	5%	9%	18%	18%
Humor	15%	11%	3%	7%
Animals-Believable	6%	7%	8%	7%
Animals-Fantasy	6%	10%	3%	5%
Sports	10%	1%	12%	1%
Biography-Historical	2%	1%	5%	2%
Biography-Contemporary	4%	--	3%	1%
Other	--	1%	1%	3%
Total Starts	395	538	411	556

Fourth grade children preferred tall tales-fantasy and humor books while sixth graders liked tall tales-fantasy and adventure-mystery. Human relations was a popular category with fourth and sixth grade girls. Information books were frequently read by fourth and sixth grade boys.

While it is important to know what kinds of books boys and girls like to read, it is also important that children read books on a variety of subjects. Teachers can spark interest in books from less popular categories by reading aloud to children from different selections. The use of puppets, drama, book talks and art are just a

few suggestions that teachers can use to motivate interest in reading various books. Historical and contemporary biographies can be introduced with a social studies or history unit. Stories about real animals can be part of the required reading for science.

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A STUDENT AUTHOR PROJECT: INTEGRATING LANGUAGE ARTS

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Creating books in the classroom is one of the most effective ways of integrating the language skills of speaking, writing, and reading. The conception, writing, illustrating, and subsequent use of the students' books all provide the young authors with a meaningful way to use and extend their communication skills.

Several groups of Hopi Indian elementary students have been involved in a student author project since 1976 at Polacca Day School (PDS), at First Mesa on the Hopi Reservation. The project has involved students in self-contained classes of first, second, and sixth graders, as well as multi-aged gifted and kindergarten students in summer classes. Similar projects at other schools have involved students in remedial reading and remedial language classes.

Student book-making is the final step in the progression of language experience activities which begins with key words and goes on to chart stories and creative writing. Books made by students are the natural product of the think-say-write-read communication process.

Reasons for Book-Making

There are several reasons that student book-making as an instructional technique can be an important part of a total language program. It provides for the:

· Integration of reading and writing. When students write and read their own books, they come to understand that writing and reading are communication processes. They may come to understand that they can express themselves through writing, and that books are the expressions of others. They may begin to see logic, sequence, and structure in writing and all communication.

· Enhancement of self-concept. Making and using their own books shows the students that we accept them and their ideas, language, and art. Expressing themselves and reading their own words validates their lives

and experiences. Students feel good about themselves when they produce books which they can read and share with others.

· Provision of good reading materials. Student-made books are meaningful to students. They are usually high-interest and easy-reading, and they become an excellent source of materials for beginners and slow readers. The familiar language and subjects of these books help provide young readers with the successful reading experiences they so badly need.

· Use of language skills. Book-making gives students a real and definite use for language and writing skills. Producing a book that will be kept for a long time and shared with others is a good reason for the students to use proper grammar and punctuation, good organization and penmanship. These materials give students a purpose in using their skills for something other than practice.

· Reinforcement of language skills. Students can be involved in creating books about content-area subjects. Making a book about a social studies or science lesson will give students the opportunity to put what they've learned in their own words and pictures. The process of writing about a lesson and then rereading it will serve to reinforce the learning.

· Stimulation of creativity. An open-minded approach to student book-making provides students with limitless opportunities for creative expression. The author/illustrator roles encourage and stimulate the use of students' imaginations and gives creative writing and artwork a purpose. The opportunity to work with one's own feelings and language gives students a much-needed break from the dull workbook routine.

· Preservation of work. Well-made books last a long time, and making one will preserve students' best writing and artwork. The books serve to document students' abilities and growth. Too much of their work is lost to the trashman.

· Fun. When students make books, they may find themselves having fun in the classroom!

Types of Books

As the reasons for engaging students in book-making projects are plentiful, so too are the types of books the students create. Over the course of four years, the

Polacca Day School library has seen a special bookcase fill up with student-made books in a variety of styles and subjects. Other books have gone home to be shared with families.

The general types of books authored by students can be seen in the following list, including typical titles.

· Beginning readers. These books are highly repetitive with simple language and controlled vocabulary. They have been made on a variety of subjects. The repetition and simple style reminds one of Bill Martin's Instant Readers. Some titles are Things That I Can Do, Up and Down, The Book of Opposites, In the Snow, and Hopi Numbers.

· Me books. These books are self-concept builders, written about the students' lives. A good activity at the start of the school year, this type of book lets the students open up, shows that we accept them and their work, and gives the teacher a chance to learn about the students. These books can include general biographical data: Family, friends, hobbies, loves and hates. Some titles include The Book About Me, My Book, and There Is Nobody Just Like Me.

· Event/Experience books. This type of book records a specific event in the students' lives, or is based on a shared experience. Field trips and holidays can be recreated and used as a basis for many language activities. Some titles are Easter Eggs, Summer Days, Phoenix Senses, I Like Valentines, and The Circus Comes to Polacca.

· Story books. These books are fiction, facilitating the broadest use of students' imaginations. Once students learn the basic elements of story-telling and creative writing, they can create their own cases of characters and diabolical plots with graphics to match. Titles include One Magic Night While I Was Asleep, Billy the Elephant, How Two Animals Tricked the Hunters, The Great Tea-Kettle Mystery, Brave One and the Bear, and Albert the Monster.

· Concept books. These books are written about a specific subject, usually the culminating activity of a unit or series of lessons. Subjects have included science, health, and social studies. Language lessons in syntax, grammar, or vocabulary can be reinforced in books about and using the ideas just learned. Some titles are The Healthy Book, In and Out, Life Cycles, No Matter What You Call Me I'm Still a Good Person,

School Workers, You Can't Ride a Water Cycle, Families, and The Hopi Tricentennial Book.

· Culture-related books. This type of book pertains in some way to a student's ethnic heritage or a cultural activity. Students have created simple picture books based on familiar cultural images, recorded everyday experiences of a cultural nature, and created make-believe stories in a cultural context. Several students made books based on stories told by older relatives, recording tales formerly known only through the oral story-telling tradition. Titles include The Hopi ABC Book, The Day of the Dance, Hopi Numbers, Coyote and the Lady Birds, When the Soyokos Came, The Baby and the Owl, Hopi Colors, The Snake and the Bird, and The Rodeo.

· How-to books. These books tell step-by-step how to make or do something. Students have to be accurate in their use of language and organization of instructions. Some titles are How To Make Pottery, How To Grow Food, and How To Ride a Wild Bull.

· Gift books. This is an extension of the greeting card idea, in which students express their feelings for their families in words and pictures. These make great gifts for holidays and are treasured by parents. Time spent making a book is much more valuable than all the hours spent making cute but useless crafts for mom. Titles are Love Is . . ., Happy Mother's Day, and I Love My Family.

· Newspapers. One other aspect to the student author project has been the publishing of a school newspaper. Stories, reports, essays, and illustrations about school news can be made, collected, edited, and pasted-up by students. Typing and reproduction of the papers are two problems, but parents could help in these areas. Editions have come out bi-weekly and monthly, with some special editions. They are distributed to all students and are useful for informing the community of school news and events.

While the above list provides simple categories for the books, most fall into two or more groups. For example, several beginning readers are culture-related, as are many event/experience books. Both the concept books and story books can be beginning readers. The books usually transcend simple categorizing and provide experiences in many forms and levels.

Books and Topics

At this point one might wonder exactly how these books are made, and how your students can do the same. The processes used in making books are varied, depending on teacher goals, student abilities, and type of book.

· Large group collection. The subject and style of the book is discussed and decided by the whole group first. Each student then writes about the topic and illustrates his writing on a page. When all the pages are put together you have a book authored by the whole group. This is the easiest and fastest way of creating a book, since each student does only one or two pages. Some examples are I Feel Happy, in which each student in a class told what makes him/her feel good, and The Navajo Clown Dance on Indian Day, in which each student told of his/her participation in a class activity.

· Small group cooperation. Small groups of students can work together to create books in two ways. In one, they divide the labor with each student doing one task: One student writes, one illustrates, one letters, etc. In the other, they write, illustrate, letter, and bind working together, each student being involved in all tasks.

· Individual creation. One student working alone in writing, illustrating, lettering, and binding a book is a formidable but rewarding project. This type of book takes much time, but is good for teaching students to work independently and to stick with long-range goals and projects.

· Combinations. Large groups, small groups, and individuals can be combined or share tasks in creating books. Chart stories written by groups can be illustrated by a student or two. Several small groups can combine reports or stories to create a volume with several chapters.

An important point in discussing processes of student book-making is that a teacher should use whatever works in a given situation, and whatever the teacher and students feel comfortable doing.

Getting Started on the Books

Once you realize the value of having students make books and are willing to devote the necessary time to it, DO IT. Teachers and students will learn to make books

BY MAKING THEM--lots of them. Each book made will be better than the last, as experience is the best teacher.

So how to start? There are two types of books that are good to begin with: (1) The Shape Book, (2) The Me Book. Making either will show everyone involved the steps in making a book.

The Shape Book is an exercise in creative thinking. It allows each student to make at least two pages quickly, and can usually be completed in one period. Each student is given an abstract shape cut from tagboard. Be sure they are all the same. The students are to make as many drawings of real things as possible, using the outlined shape as part of the drawing. The shape must be visible in the drawing, and should be traced from the tagboard cut-out for uniformity. It can be turned in any direction. The words are simple and repetitive, with only the name of the object changing. Example: Given a simple circle, some first graders made a Circle Book: "At first it was a sun, and then it was a clock, and then it was a wheel, and then it was a ball." This large-group project can show a whole class all the steps in the book-making process in no time (Gaston & Shoemaker, 1973).

The Me Book is a longer project which gives students a chance to learn more about the process by writing about themselves. Since the students know about their own lives, there is no lack of material. Even the youngest students can make this kind of book with the help of dictation. By the time the students have written about and illustrated the many facets of their lives, they will have learned the book-making process page-by-page.

Supplies

· Paper. The choice of paper depends on how the book will be used. If it will be in the school library and used by many students for a long time, heavy paper is essential. If it is for limited use, any paper will do. Construction paper does not hold up well. Tagboard is too heavy. Index stock from your local print shop is about the best.

· Covers. Matte board or cardboard is best. A book bound with hard covers lasts longer and is taken more seriously by students. Staples and book-binding tape are recommended for binding. Laminating film may be used to preserve the covers.

Basic Steps to Authorship

1. Start with an idea. Decide on the subject and style. Determine where pictures will be and what vocabulary will be used. Use a simple format at first.

2. Write the words or story on writing paper. Edit, rewrite and proofread.

3. Decide which words go on which page. Go through the story and put slashes in to indicate where a page is turned.

4. Illustrate and write or type according to the page breaks. Leave a 1/2" to 3/4" margin on the side of the page which will be stapled. This will insure that nothing important gets covered. On the front of the page the staple-margin is on the left side. On the other side of the same page it will be on the right side. Lines may have to be drawn to indicate this margin for beginning authors.

5. Make a title page. Include the title, author, illustrator, date, and an illustration.

6. Covers are illustrated and lettered with the title and author on the front. The art can be done directly on light-colored board or glued onto dark board. Remember to leave staple-margins on the covers. Laminate before binding.

7. To bind these pages and hard covers: (a) Make cardboard covers slightly larger than the pages (about 1/8" to 1/4" on each side). After the covers are lettered, decorated, and laminated, take the front cover only and cut a 1/2" to 3/4" wide strip from staple-margin side on the left. (b) Tape this strip back to the rest of the cover on the inside, leaving a 1/8" gap between the strip and the rest of the cover. This will allow the front cover to bend. The tape acts as a hinge. (c) Put pages and both covers together. Staple the staple-margin (left) edge several times. Staple only in the strip that has been taped onto the front cover and through to the back. Heavy-duty staples may be needed. (d) Use binding tape to cover the staples and spine. The tape should wrap around from the gapped margin on the front to cover the staples on the back. (e) Enjoy your new book!

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THE CASE OF COMMUNICATION APPREHENSION: SOME IMPLICATIONS FOR COMMUNICATION INSTRUCTION

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The areas of reading and communication have much in common. In recent years, these commonalities have become more apparent to both theorists and practitioners in education. H. Alan Robinson (1977) suggests that during the last decade "a growing emphasis was placed on communication skills (including reading) that would help learners cope with the tasks confronting them in their everyday lives" (p. 1). This emphasis on functional communication competencies has facilitated the increased professional interaction between reading and communication professionals. As a result, both reading and communication scholars have devoted significant attention to various attitudes associated with teacher expectations, perceptual attributes associated with language variance, and the eradication of sexist and racially derogatory language from oral and written materials. While professionals in reading have explored student interests and attitudes that relate to reading competency, the self image of a communicator has received scant attention outside the field of speech communication. Those attitudes associated with communication apprehension have significant implications for reading and communication arts teachers. In research conducted on over 500 freshman and sophomore high school students in northern California, a strong relationship between communication apprehension and low reading achievement scores was discovered (Davey, 1976). This finding as well as some 200 studies investigating communication apprehension and its effects suggest further research into the relationship of attitudes toward communication and reading attitudes, interests, and competency is appropriate.

In an attempt to acquaint reading educators with the problem of communication apprehension, this paper will investigate the following: (a) the nature of communication apprehension; (b) the extent it affects the school population; (c) the procedures that are available to diagnose communication apprehension; and (d) the instructional implications of communication apprehension.

The Nature of Communication Apprehension

All of us at some time have encountered those who exhibit a noticeable fear or perceived inadequacy about communicating. This apprehension and corresponding attempts at avoiding the most basic communication situations are even more apparent to those who teach communication.

References to behaviors associated with communication apprehension appear in the literature as early as 1937, when Lomas identified "stagefright" as the unwillingness of an individual to communicate in a speaker-audience relationship. Since this study, an individual's willingness to communicate has been analyzed under a variety of labels including: Confidence (Gilkinson, 1943), stagefright (Clevenger, 1955), reticence (Phillips, 1968), speech anxiety (Lamb, 1972), shyness (Zimbardo, Pilkonis, & Norwood, 1975), communication fear (Porter, 1974), verbal reticence (Lustig, 1974), self-concept as a communicator (Crowell, Katcher, & Miyamoto, 1955), unwillingness to communicate (Heston & Peterline, 1974), audience sensitivity (Paivio, 1959, 1965), and communication apprehension (McCroskey, 1970).

In research conducted at the Pennsylvania State University, four categories of communication apprehensive students have been identified:

1. Persons who are quiet because of psychological problems. They desire to speak but cannot.

2. Persons who are quiet because they enjoy listening more than speaking. They are able to express themselves when they desire.

3. Persons who are quiet because of contempt for their listeners. They feel no need to express themselves under certain circumstances.

4. Students who are reticent because they don't understand the modes of oral expression required by society. (Phillips, Dunham, Brubaker, & Butt, 1973, p. 141)

Whatever its origin, the general behavior of the communication apprehensive child is characterized by a pattern of communication withdrawal. Specific behaviors associated with this disability include: Chronic nervousness characterized by physical shaking, perspiring, throbbing pulse, and audible heartbeat; stammering, incomplete messages and monosyllabic utterances; inability to cope with disagreement; and general intimidation by peers and superiors (Phillips, Butt, & Metzger, 1974).

While many students experience one or more of the above behaviors occasionally, the communication apprehensive experiences one or more of these behaviors habitually. Communication apprehensives perceive themselves as incapable of succeeding as communicators, as having no need to communicate, and as such induce a chronic apprehension of personal interaction. In the elementary school child, the growth of verbal withdrawal may be associated with several factors including delayed or inadequate language development, poor self-concept, unstable home situations, and interpersonal problems (Dickson, 1974; Wood, 1976).

Hurt, Scott and McCroskey (1978) summarize the concern:

> Communication apprehension has to do only with apprehension about communication either orally or in writing . . . . We also need to distinguish between the person who is afraid to communicate generally and the person who is affected by bad days, a threat, environment, or alienation . . . . We are talking here about an abnormal fear of communicating. The student who is a communication apprehensive will not only be fearful of communicating with the teacher, but will also be fearful of communicating with peers, parents, or anyone else. We are not talking simply about formal communication, like giving a speech before the class, for almost everyone feels some anxiety in such a situation. The communication apprehensive, however, would feel extreme anxiety in a public setting, but would also be apprehensive in a discussion among peers, or even talking to another single individual, whether it be a teacher or a peer (p. 148).

Incidences of Communication Apprehension

Some 200 studies have been devoted to the problem of communication apprehension, and approximately 50 of these studies have been concerned with establishing the extent of the disability. Estimates of individuals suffering from significant levels of communication apprehension range from 5 to 40% of the population (Bruskin, 1973; Davey, 1975; Geer, 1965; McCroskey & Daily, 1975; Pedersen, 1968; Shaw, 1966; Zimbardo, Pilkonis, & Norwood, 1975). Realistic estimates suggest that approximately 25% of the population suffers from levels of communication apprehension which require remedial attention. Research indicates that between 10 and 20% of all college students and adults suffer from extreme communication apprehension, and the percentages may be somewhat higher in the secondary and elementary schools (Hurt,

Scott, & McCroskey, 1978). According to Phillips, Butt, and Metzger (1974),

> In an extensive survey of 20,000 school children, kindergarten through twelfth grade, done in central Pennsylvania and the Bay Area of California, it was discovered that in the elementary schools, 14% of the children demonstrated this withdrawal from communication; in the junior high school, 24% displayed it; in the high school, 12%. (p. 144)

By many standards, these results are conservative estimates; however these figures represent the largest number of subjects tested in a single program of research. Despite variation in the estimates of communication apprehension, the importance of this research seems to lie in that: (a) communication apprehensive tendencies that warrant attention have been found at all grade levels tested; and (b) while there is an apparent reduction in severity as grade level increases, there is little indication that communication apprehensive behavior is eradicated without systematic remediation procedures.

The Diagnosis of Communication Apprehension

Available group measurement devices fall into two general categories: Observation, and self-report. Behavioral observation devices have as their focus inventories of communication behaviors reflecting high apprehension (Burgoon & Burgoon, 1974; Clevenger & King, 1961; Davey, 1975; Mulac & Sherman, 1974, 1975). Such behaviors may include: Speaking in a low voice (English, 1964), sitting in areas outside the mainstream of class activity (Davey, 1975), having lower amounts of verbal output (Lustig, 1974), tending toward submission (Chenowith, 1974), exhibiting extreme tension (Burgoon & Burgoon, 1975), evidencing inability to respond (Hopf, 1970), lacking eye contact in interactions (Zimbardo, Pilkonis, & Norwood, 1975). Typical of the observation measures is my Communication Apprehension Behavior Inventory developed to diagnose communication apprehension in elementary school children. The instrument is based on the notion that communication apprehensive behavior might be identified by inventorying patterns of verbal and non-verbal communication that were considered by teachers to be "unhealthy" in relation to the behavior of well-adjusted students. A checklist was developed and tested in a study conducted in September, 1975 (Davey, 1975).

To use the Communication Apprehension Behavior Inventory, teachers are asked to evaluate their students in terms of 10 target behaviors:

1. frequently chooses to play alone
2. frequently uses gestures or other non-verbal communication instead of speaking
3. usually quiet and passive
4. frequently speaks in single words or short phrases
5. habitually chooses to sit in areas outside the mainstream of activity (e.g., back of room)
6. gets perceivably nervous when asked to recite
7. avoids speaking during sharing time
8. rarely participates in class discussions
9. rarely asks questions when something is not understood
10. rarely volunteers to answer questions in class.

Teachers are cautioned to identify only patterns of behavior, being careful to exclude single or infrequent occurrences. Scoring is accomplished by summing the number of behaviors observed and comparing the total to the following degrees of communication apprehension:

Non Apprehensive	0 - 1
Mildly Apprehensive	2 - 3
Moderately Apprehensive	4 - 5
Seriously Apprehensive	6 - 7
Severely Apprehensive	8 - 10

The main weaknesses of observation methods are their focus on symptoms rather than causes, and the possibility of inaccuracy usually in the direction of underestimating the amount of apprehension (Dickens, Gibson, & Prall, 1950).

The self-report method of diagnosis of communication apprehension asks the individual how apprehensive they feel about communication interaction. Such measures have been developed by Crowell, Katcher, and Miyamoto (1955), McCroskey (1970), Paivio, Baldwin, and Berger (1961), and Phillips (1973). Perhaps the most widely used self-report instrument is McCroskey's Personal Report of Communication Apprehension (PRCA). Below is the adult

version of the PRCA. Subjects are asked to rate their degree of agreement (1) and disagreement (5) for each statement:

*1. While participating in a conversation with a new acquaintance, I feel very nervous.

2. I have no fear of facing an audience.

3. I look forward to expressing my opinion at meetings.

4. I look forward to an opportunity to speak in public.

5. I find the prospect of speaking mildly pleasant.

*6. When communicating, my posture feels strained and unnatural.

*7. I am tense and nervous while participating in group discussions.

*8. Although I talk fluently with friends, I am at a loss for words on a platform.

*9. My hands tremble when I try to handle objects on the platform.

*10. I always avoid speaking in public if possible.

11. I feel that I am more fluent when talking to people than most other people are.

*12. I am fearful and tense all the while I am speaking before a group of people.

*13. My thoughts become confused and jumbled when I speak before an audience.

14. Although I am nervous just before getting up, I soon forget my fears and enjoy the experience.

*15. Conversing with people who hold positions of authority causes me to be fearful and tense.

*16. I dislike to use my body and voice expressively.

17. I feel relaxed and comfortable while speaking.

*18. I feel self-conscious when I am called upon to answer a question or give an opinion in class.

19. I face the prospect of making a speech with complete confidence.

20. I would enjoy presenting a speech on a local television show.

Scoring is accomplished by summing the scores for items with asterisks, summing the items without the asterisks and computing an index using the following formula:

PRCA Index = 66 - Total 1 + Total 2.

Persons with indexes above 72 are highly apprehensive, those between 61 and 72 are moderately apprehensive.

Admittedly, this type of measure focuses largely on present attitudes and physiological symptoms. In addition, self-report measures lack specificity in situation, correlates, and causes (Daly, 1975).

While current research is being conducted to overcome the weaknesses of existing instrumentation, little advancement can be expected in the near future. Despite their weaknesses, existing measures appear to be moderately effective in the identification of communication apprehension.

Instructional Implications of Communication Apprehension

Having described the nature, incidences, and diagnosis of communication apprehension, the final section of this paper will discuss the major classroom implications. It is safe to say that most teachers have little awareness of communication apprehension. It is not uncommon for communication apprehensive students to be considered well-behaved, because they are typically quiet. Upon further investigation, the habitually quiet child is likely to be faced with several problematic issues later in life.

Perhaps the most severe effect of communication apprehension is the general tendency of high apprehensives to withdraw from normal communication situations. Many will overtly seek to avoid communication. McCroskey (1977) describes the person with a high level of communication apprehension as

> . . . typically an introverted individual who lacks self-esteem and is resistant to change, has a low tolerance for ambiguity, and is lacking in self-control and emotional maturity. (p. 84)

In addition to personality correlates, communication apprehensives seem to develop an apprehension toward

writing (Daly & Miller, 1975a, 1975b), tend to score lower on reading and language arts achievement tests (Davey, 1976), tend to achieve lower grade point averages in college (McCroskey & Anderson, 1976), and develop negative attitudes toward school (Hurt, Preiss, & Davis, 1976; McCroskey & Sheahan, 1977). In later life, communication apprehensives are prone to select jobs that require little communication, to be less successful, and to be perceived by others rather negatively (McCroskey, 1977).

There is no evidence to suggest that communication apprehensives outgrow their disability. This trend places a significant burden on the classroom teacher to recognize the symptoms of communication apprehension and to provide appropriate treatment. For university students and adults, programs of systematic desensitization and relaxation therapy have worked well to combat the problem. For students in elementary, secondary, and higher education, the teaching of functional communication competencies has produced positive results.

Perhaps the most important educational response to communication apprehension is prevention. Teachers can make a substantial contribution by establishing positive climates for communication. Teaching communication as a functional skill in a natural context will significantly contribute to positive behaviors. Communication behavior should never be punished and tied to classroom management or discipline. Rather, efforts should be made to teach language appropriateness. McCroskey (1977) suggests four steps that should reduce the chance of a child developing high communication apprehension:

1. Extra effort should be exerted to provide children with reinforcement for their communication during their formative years, particularly in large families.

2. Children with slow language development or deficient speech skills should receive help as early as possible so that they do not lose positive reinforcement as a result of deficient skills.

3. Teachers should be trained to recognize the presence of CA in a child and provide extra reinforcement for the child's communication, particularly in the early school years.

4. Classroom teaching procedures should be modified so that children are not required to perform orally at a level beyond their skill development, such as eliminating required oral reading of

> material in the first and second grades that includes sounds that the child has not yet mastered. (p. 92)

Secondary school and university instructors should provide instruction in interpersonal communication skills, establish instructional climates that value student input, and provide the student ample opportunity for communication experience.

By recognizing the symptoms of communication apprehension, by understanding the severity of its implications, and by taking steps to establish climates and instructional strategies to counteract this disability, teachers can take a major step in controlling the most widespread communication disorder facing students and adults.

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TOWARD LIFELONG READING

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Looking Beyond The Walls--A Parable

Once upon a time, Miss Peabody, a teacher from Boston, decided to visit England, the land of her forefathers. From Piccadilly Circus, to Birmingham and Stratford-Upon-Avon, she delighted in the people and the customs of the land. How different they were, even though they looked like the folks back home and even spoke the same language, at least some of the time.

Upon her return to school that fall, she delighted in telling her students about England, its people and its customs. She should have taught Bradford's Plymouth Plantation, but the transgression was overlooked because, after all, it was her first trip abroad, and she was still excited about her experiences.

The joys of this first adventure encouraged her to travel to Germany, Austria, Lichtenstein and Italy the following summer. While traveling, she wondered whether knowledge of German would enable her to talk with other people in the Conditories and Gasthauses. Perhaps she could even order food that she liked rather than selecting the fourth item today and the fifth item tomorrow. Still, in Italy it was easy to order spaghetti without knowing Italian, and it was always good. But why, she wondered, did they bring her meat and cheese when all she had ordered was spaghetti? Strange Italians!

Returning to her classroom in the fall, she found her fourth graders once again delighted to hear of her travels. How clever they thought their teacher was to order by the number since she could read them and not the rest of the menu. They begged Miss Peabody to invite Elke's grandmother to visit them at school. She was from Germany and she could read German too. She'd be able to tell them about the things in the German menu which was now displayed on the classroom bulletin board.

The success of Elke's grandmother's visit encouraged a boy in the class to invite his mother to school. Guiseppi, who was known as Joe at school, informed the class that his mother would be happy to cook an Italian meal just like Miss Peabody had in Italy. And she would explain things to them too as Elke's grandmother had.

Now it was the custom in that part of the land to teach only those things approved by the state and district curriculum committees, and it was an unpardonable sin to teach something which was the responsibility of others.

Oh, but what an exciting year it was for the students in Miss Peabody's fourth grade class. However, there was some concern for her covering material that was definitely part of another teacher's curriculum, namely, the sixth grade teacher. Although upsetting to her, this did not stop her from planning another trip abroad the following summer. For Miss Peabody, the teacher from Boston, was now a person of the world.

She planned a trip to the Middle East which would include the Holy Land, Greece and Egypt. She found the people there to be much more interesting than she had thought possible, although they too were somewhat strange. Why didn't they speak English? And their food was something that she had never experienced before. And why couldn't they use the American alphabet in their writing? She might have made out some of the words, for she was now a person of the world. In her mind she thought all of this to be exciting now rather than different.

Upon her return, she was reminded to stick to the approved curriculum as detailed in the district guides. On the other hand there were students who had heard of the exciting things in Miss Peabody's room and were looking forward to the year in her fourth grade class. They wanted to hear about her travels and then invite people to visit their classroom.

One boy, named George, was looking forward to his mom's visit. She would bring dolmas and pilaf to class. They were his grandfather's favorite food, and George was proud of the old man and his heritage. Perhaps his grandfather would come and tell them stories of his youth in Greece.

Now Miss Peabody was not one to hurt the feelings of the youngsters in her charge. So she wasn't going to squelch George and the other children in her fourth grade class. Instead, she decided to have a bulletin board telling of the places visited during the summer by members of the class and that, of course, included the teacher.

So the students in Miss Peabody's fourth grade class, although they longed for dolmas and pilaf and tales of the old days in a far off land, studied Chief Massasoit instead and looked at picture postcards and menus on a bulletin board.

"Looking Beyond the Walls" suggests that the school curriculum go beyond the guidelines of a district. Curriculum must not be limited by the books approved for classroom use. Nor must other classroom materials be limited to those recommended for a particular group of children. Making readers of children implies that children not only read more than what has been approved for use in their classrooms, but also that they elect to do so. In a sense, children look beyond their classroom walls to read for interest, for enjoyment or for school assignments.

When children look elsewhere for books to read, they are involved in a very important experience similar to that of an adult searching for books in libraries, or finding good titles from other adults in conversation or from reviews of published materials. Toward lifelong reading is a process that can begin in school, or should begin in school if it hasn't been developed elsewhere, particularly in the home.

Adult readers often reread favorite poems, essays, books or other written materials of particular interest. Some adults recycle the same titles year after year for enjoyment or perhaps for a new insight.

The books of Hermann Hesse have been of particular interest to me. His books reflect love, hate, greed, social pressures and all the other experiences that are part of being human.

Who has not experienced the tranquility of Siddhartha? Adults have often related their lack of concern about the questionable morals of the woman who played such an important role in Siddhartha's life. They made no value judgment about her, save for her friendship with Siddhartha and her role in helping him find meaning in life. The tranquility one experiences while traveling with Siddhartha makes the book easy to read and reread.

Who has not experienced a friendship like that of Narcissus and Goldmund? The novel isn't just about good versus evil. It includes those characteristics that are associated with being human: Love, understanding, patience, piety, acdeptance and searching. Somehow, by rereading Hesse, I find new insights about life and people.

Hesse books don't only speak of friendship, they also question the social values of his day. Of particular interest to us is his treatise of the pressures exerted on children in schools. In Beneath the Wheel, he relates the exalted role of the student of a graduating

class. This youngster lived somewhere in the Alps at the turn of the century. He was respected by all in his village, solely for his status as the top student of his class. The pastor tutored him in religion, math and science. The Burgemeister discussed politics with him. The cobbler would take time to discuss problems of the world as he would do with other men of the village. Chores were out of the question for the honor student. He was either studying for his university entrance exams or resting and meditating.

The lad passed the exam and was accepted for the fall term. The summer was spent in discussions with the village elders and with fishing respites at his favorite hole. That fall he was sent off to the university with the blessings of all the villagers.

Soon after arriving at the university, he realized that he wasn't the only honor student of a village school. He was not only aware of the brightness of his new classmates, he also found some surpassing him in honors. No longer was he the first student, nor the second; now he found himself fifth. Other students became number 15, 20 and, of course, one was last.

Hesse wrote of the failure syndrome of the students of his time. Although all were once first, now only one could be. The dishonor felt by some led them to drop out of school and some to commit suicide. He referred to students being crushed "beneath the wheel." Are we still crushing students "beneath the wheel?"

Children learn to read by reading as well as being read to. As I look back on my youth, I find that I became a reader because I was read to and, of course, because many good books were available.

Having someone read aloud is an experience that most people enjoy. During the past few years, I have read to many people around the country. In every instance, there were comments on the pleasure of listening to someone read aloud. Graduate students in my classes, and audiences all over, have sat in silence while being read to.

When students are encouraged to go beyond the walls of the classroom to select exciting trade books, they have something besides school grades to be happy about. Hopefully they will find stories and characters exciting enough to be intrinsically motivating for them to read and reread. They no longer look to grades as the only success in school, for their success now includes the world of literature. They are well on the road of lifelong literacy.

NEW TRENDS IN TEACHING READING COMPREHENSION: RESEARCH AND APPLICATION

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Dolores Durkin (1978-1979) recently reported the results of an observational study which was undertaken to investigate the kinds of reading comprehension instruction now being conducted in elementary schools. She and her colleagues chose to observe 4th grade classrooms, the traditional time of transition from "learning to read" to "reading to learn." Classrooms chosen for observation were those which were recommended by principals as epitomizing the best of instruction. No observations were done on Mondays, Fridays, or days before holidays. Durkin's surprising major finding was that very little comprehension instruction, defined in this study as "teacher does/says something to help children work out the meaning of more than a single isolated word," occurred in the observed classrooms. Out of 4,469 observed minutes, comprehension instruction occurred for only 28 minutes, less than 1% of instructional time. Teachers spent most of their time in non-instructional and transitional activities. Children spent most of their time writing answers to questions or filling in blanks in workbooks, listening to explanations of how to do these tasks, or in non-instructional activities. Durkin reports that she was struck by the number of observed lessons where published materials dictated both the objectives and the activities of the lesson, confirming a report by the Educational Products Information Exchange Institute (1977) that 95% of what is done in classrooms can be attributed to commercially prepared materials.

It can be concluded by these reports that if comprehension instruction does occur in ordinary classrooms, it is likely to be dictated by commercially prepared materials. However, an examination of materials which purport to teach comprehension reveals that for the most part they actually test comprehension rather than teach it. Most of the lessons consist of a short selection followed by several multiple choice questions, often at a factual or detail level. Students are expected to read the selection and answer the questions, but are allowed to look back to find the answer if necessary. This is what Durkin termed assessment of comprehension, in that no actual instruction occurs. What's more, such multiple

choice tests are apparently the least effective way to assess a student's comprehension of text (Wallen, 1972).

Although there appears to be a dearth of commercially prepared materials for actually teaching comprehension, there are several research-based strategies which, if added to a classroom reading program, are likely to increase the reading comprehension abilities of students.

Strategy No. 1: Teach Children to be Expert Decoders

Several studies (Golinkoff, 1975-1976; Perfetti & Hogaboam, 1975) indicate that good comprehenders decode faster and more accurately than poor comprehenders. Inability to comprehend well may not be so much a result of over-instruction in decoding as it is the result of under-instruction (Eeds-Kniep, 1979). In order to be expert decoders children need to master sound-letter correspondences, need to be able to blend these sounds and letters together (Haddock, 1978), and need to know all of this at such a level of proficiency that they have gone beyond accuracy to automaticity (Samuels, 1976). Perfetti (1977), on the basis of several studies, asserts that "speeded decoding is intimately tied with skilled comprehension" (p. 40). In addition, Weaver (1979a) concludes that "in order to shift the balance in favor of comprehension, decoding skills must be developed to the point where they are not just accurate, but automatic--where little or virtually no attention to them is required" (p. 58).

Although mastery of decoding skills is extremely important to skilled reading, it is equally important that these skills be taught as tools for getting meaning. Gibson and Levin (1975) stress that beginning reading instruction should be a parallel and multi-leveled path of meaningful activity paired with systematic code-breaking instruction. Golinkoff (1975-1976) has reported that a major difference between good comprehenders and poor comprehenders is that poor comprehenders do not correct themselves when they've made an error that interferes with meaning as much as do good comprehenders. Poor comprehenders have somehow missed the whole point of reading, that words are supposed to make sense. A program which pairs beginning decoding instruction with language experience activities has a built-in comprehension component and is one way to avoid the danger of producing decoders who don't understand that they are decoding words in order to find out what the author means to communicate.

The decoding skills which are taught should also be transferable to the reading of any book, thus assuring continuing motivation for reading. For example, William Durr has developed a list of high frequency words which occur in children's literature (Durr, 1970). He has arranged the words hierarchically according to frequency of occurrence, stating that the first 10 account for 25% of the words encountered in most stories, the first 25 account for 33% of the words and the total 188 words on the list account for 70% of the words which a child is likely to encounter when reading any story. It seems a useful list of words to teach. The same logic applies to teaching common high frequency English spelling patterns. Fries (1963) has analyzed these and has determined that the CVC pattern (as in hat, bin, etc.) occurs most often, both in single and multisyllabic words; the CVC+e pattern (as in line, hate) occurs with next highest frequency, and the CVVC pattern (as in bait, goat) has limited application. A decoding program which stresses mastery (to an automatic level of at least one per second) of the CVC and CVC+e patterns is one which has high utility. A combination of teaching these high frequency patterns with teaching Durr's high frequency irregular words should result in readers who can decode almost any word they encounter in any kind of reading material.

Strategy #2: Provide Direct Instruction in Word Meanings

Farr (1969), in reporting data from David (1968), has stated that comprehension as we traditionally test it is based primarily on knowledge of word meanings, and secondarily on some factor designated as "reasoning with reading." In a recent study, Kavale and Schreiner (1979) found that good comprehenders often used a key lexical item to reason through their answers. Gipe (1978-1979) reported that a strategy which relates the word to be learned to familiar concepts in context was the most effective way to teach word meanings. Presenting synonyms was also an effective method, but looking up the words in the dictionary or sorting words into general categories were not. Gipe suggests that all learners be required to respond either in writing or individually in order to be sure that learning of the new word meanings has generalized. It is not enough just to present the new vocabulary words before reading the story; direct instruction in word meaning is necessary for full comprehension of test. A suggestion following Wallen's model (1972) for teaching word meanings: Why not test for generalization of word meanings before teaching? If students can give either a definition or an example of the word, that's one they don't need to learn. A surprising number of students are presented daily with

material that they have already learned, this squanders valuable instructional time of both teacher and learner.

Strategy #3: Provide Direct Instruction in Organizing Text

Stoodt (1972) found a significant correlation between students' comprehension of conjunctions and their comprehension of text. Robertson (1968) analyzed elementary school reading materials and found that one-third of them contained connectives. Durr (1977) has reported that the 14 connectives that appear to cause the most trouble are as follow: Although, and, but, how, however, if, or, so, that, thus, where, which, while, and yet. He suggests that differences in meaning be communicated through comparing changes in meaning which occur when the connective is changed (e.g., "He has been married for 27 years and he still loves his wife." versus "He has been married for 27 years but he still loves his wife."). Durr says that the two sentences both report the same data about the couple in question, but the second sentence carries an added implication about general attitudes of husbands involved in long-term relationships. The subtle nuances of changes in meaning resulting from changes in connectives can only be observed and taught in context.

Poor comprehenders often do not make full use of context to derive meaning from what they read. The efficacy of the cloze procedure as a teaching technique for increasing the use of context has been debated over the past few years. Jongsma (1971) reported some time ago that merely taking out every nth word in printed material and having students fill in the blanks is not an effective technique for increasing the use of context clues. Kennedy and Weener (1973), however, found that when the teacher and students discussed how possible words might fit in the blanks or how the surrounding words give hints to help identify the missing word, the use of clozed material actually did increase students' comprehension as measured by the Durrell Reading Comprehension Test.

Weaver (1979b) reported that significant improvement in two out of four measures of comprehension occurred when poor readers were taught to combine sentences in a systematic manner. She taught students to arrange a cut-up sentence in its proper order by first looking for the action word and, then, asking wh questions: Who, what, when, where. An element of timing, how fast the students put the cut-up words together, seemed to contribute to the effectiveness of the task.

Systematic instruction in sentence comprehension appears to be a worthwhile technique for increasing reading comprehension.

Strategy #4: Teach Students to Identify the Author's Structure

Meyer (1979) reports that the reader's ability to identify the way an author presents the main ideas in a selection is highly related to how much he or she can recall after reading the selection. In addition, training poor comprehenders to recognize specific structures that authors may use in their writing increases comprehension. Meyer suggests introducing the task through the use of advertisements, many of which clearly illustrate common structures. For example, an adversative structure presents two opposing points of view and is one of the structures that has been found to most facilitate recall. An advertisement which shows this structure, "Mining is ugly, destroys nature's beauty" versus "Mining brings us important minerals," can help students identify the structure first in a simplified form. Many advertisements also illustrate a response or question and answer structure: "How does the man who drives the snowplow drive to the snowplow?" Meyer suggests that students be introduced to the whole idea of identifying the author's structure through advertisements, then be helped to identify the various structures in prose. Gradually, students will be able to recognize and use the author's structure to organize their own recall, thus increasing comprehension.

Strategy #5: Teach Better Comprehension by Asking Questions That Go Beyond Recall

Anderson and Biddle (1975) report that, in general, teacher constructed questions have facilitative effects on the learning of prose. They say that the effects are greater when the questions are placed after the reading and when students respond in a free response rather than a multiple choice format. Research also shows that, in general, recall-level questioning produces recall-level responses, while higher level questioning produces higher level responses (Rickards, 1975-1976).

Ryan (1973) reports a study which found that teachers' use of high level questions resulted in greater achievement on the part of students, and Rickards and Hatcher (1977-1978) found that when poor readers were asked to respond to higher level questions after reading, they remembered significantly more than when they were

asked rote-level questions or no questions at all. In fact, when recalling details, the poor readers did as well as the good readers.

Much of the research associated with questioning at various levels indicates that poor comprehenders who have minimal decoding and vocabulary problems are aided most in comprehension by higher level questions. Good comprehenders seem to maintain high levels of comprehension without them.

Strategy #6: Teach Students to Self-Question

Frase (1977) reports that much more recall occurs when students ask themselves questions about the material and then read to answer the questions than if they just use ordinary study techniques. Helfeldt and Lalek (1976) found that generating their own interpretation questions increased learners' abilities to answer these kinds of questions. Andre and Anderson (1978-1979) found that self-generated questions were most effective with students who were judged to have low verbal ability.

It appears that, depending upon the reading ability of the student, the old tried and true techniques such as SQ3R (Robinson, 1962) and ReQuest (Manzo, 1979) have been somewhat validated by recent research.

Strategy #7: Teach Students to Use Imagery

Steingert and Glock (1979) found that much more inferencing took place with a group that was taught to create images of what was happening in a particular selection as they read it. Kulhavy and Swenson (1975) also report that teaching learners to use their imaginations to picture the action as they are reading increased reading comprehension. Lesgold, McCormick and Golinkoff (1975) taught poor readers to use imagery by having them cartoon the events in the selection with stick figures. They found not only a significant increase in comprehension among those students who used the technique, but also found that these students had to be reminded to use it.

The evidence does suggest that this simple technique is one well worth adding to any reading comprehension instructional program.

Strategy #8: Insure Comprehension by Organizing the Reading Program Around Meaningful Activities

Page and Pinnell (1979) suggest that the reading program will have built-in comprehension if teachers

organize it around the reasons that anyone would ever want or need to read. They build on the work of Halliday (1975) and Tough (1973) who have reported how important the reasons for talking are to children's language development. Page and Pinnell list some uses for reading that teachers can emphasize, thereby increasing comprehension as a direct outgrowth of reading activities that are relevant to the lives of students.

The first major function of reading is to cope with complexity. Reading directions for building a model, a recipe for classroom cooking, forms for acquiring a checking account or getting a tax refund, lists for purchasing materials, notes for classes, are all examples of the practical problem-solving aspects of reading to cope with the complexity of daily living. Students who see that reading is necessary to reach an immediate goal (e.g., to order lunch, to sew a dress) have a built-in reason for understanding what they read.

A second major use for reading is to cope with leisure time. All citizens of this highly print-oriented society have innumerable chances each day to read incidentally. We read print displays on television, the ingredients and minimum daily requirements on the sides of cereal boxes, bumper stickers, bus advertisements (Don't you hate that sign on the back of the bus that says, "You can't help reading this"?), bill boards and notices. A teacher can take advantage of this tendency to read anything in sight by having reading material available at any place where students are likely to be waiting for even a minute or two. Places where students line up (e.g., the cafeteria or outside the classroom door) are ideal spots to display all kinds of reading material at eye level. Such placement guarantees that the material will be read over and over again.

A third reason for reading is to communicate over time. Page and Pinnell (1979) suggest that the power of the written word is in part the result of written history: We can read what was written two minutes or two thousand years ago. Teachers can capitalize on this reason for reading by having students keep journals for periodic rereading to see what was happening to them in days past. They can bring in historical materials in their original form; letters, diaries, books written long ago, to show how communication can occur between one generation and another or even between one age and another. Books which deal with the past are a highly effective way to help students understand history in human terms. Anne Frank's diary makes the horror of the holocaust real and Julius Lester's compilation of communications from slaves gives students an understanding of suffering endured that no history text can impart.

A fourth reason for reading is to communicate over space. Letters are powerful motivators for reading, and children will never refuse to read a message written directly to them. Some outstanding programs for tapping this function of reading have been developed. Two teachers (Shirley Keister and Jennifer Henderson, Mesa Public Schools, Mesa, Arizona) have matched a 7th and a 1st grade class and these students have written to each other all year. The 7th graders have created books and other reading materials for the 1st graders, and the 1st graders have written all kinds of stories and letters for and to their valued pen pals. The increase in reading and writing caused by the intrinsic motivation of communicating with someone by letter has been phenomenal.

Another teacher (Claudia Bachtel, Murphy Public Schools, Phoenix, Arizona) created a unit on snakes and reptiles for her second graders. She housed the books in a giant stuffed replica of Ungerer's Crictor the Boa Constrictor, who just happened to have swallowed a box. A mailbox was available and children were encouraged to write letters to Crictor, who answered in a snakey hand. The teacher reported a tremendous increase in writing and reading activity because of the value children placed on those letters.

A fifth major reason for reading as well as built-in insurance of comprehension is an emphasis on reading for pleasure and enjoyment. Many surveys of children's definitions of reading reveal that they often equate reading with workbook exercises or filling in blanks. Reading is work. There should be time in school to read for pleasure and enjoyment; many children won't get a chance in any other place. Some teachers provide time for reading through organized programs such as USSR (Uninterrupted Sustained Silent Reading) or TRIP (Time to Read in Peace). Organized or not, the teacher who doesn't tap this built-in motivator for reading is missing a tremendous opportunity to increase reading skill through practice. Readers love to read jokes, puns, newspapers, magazines, comic books, their own and their classmates' writing, fantasy, mystery, comedy, romance, science fiction, escape reading of all kinds. What better way to talk about words and what they mean than through exposure to Wiseman's Boris and Morris books. In Morris has a Cold, Morris says, "I have a cold, my nose is walking." "You mean your nose is running," says Boris. "No, my nose is walking," says Morris. "I only have a little cold." Material like this can make reading time a lot more fun for both students and teachers.

The last function of reading, guaranteed to provide comprehension insurance, is reading to represent and make

sense of life's experiences. Someone once said that we read so we know we're not alone. The power of good literature is its ability to touch and evoke responses in the reader, universals that are part of the human condition. Children respond to this power from their first exposure to a good book. Read Krauss's Whose Mouse Are You? to four-year-olds, and they will read it right back to you. Read Mayer's There's a Nightmare in my Closet to a class of six-year-olds and see how they respond with fears of their own and delicious discussions about their own imagined monsters. Read Krauss's Leo the Late Bloomer and see how many want you to read the story of the little tiger who finally made it over and over again. The power of good books to evoke responses occurs at any reading level, even at the very beginning. Yet so often the reading material we offer our students, especially our students who are struggling with learning the skills of reading, is inane and meaningless, words which no one ever would choose to read voluntarily, much less respond to with one's soul. No one is ever going to become a reader (although they may surely learn to read) unless they are exposed to the power that literature has to represent and make sense of life's experiences.

There are numerous strategies that teachers can employ to increase the reading comprehension of their students. Eight such strategies have been discussed in this paper. Implementing the last, organizing the reading program around meaningful activities, may result in much less need for the other seven.

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RECENT RESEARCH IN SECOND LANGUAGE ACQUISITION AND IMPLICATIONS FOR INSTRUCTION

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When I first began teaching English as a second language to children in 1968, the commercial materials that I was given were aural-oral, audio-lingual in nature. That is, the materials broke up English into a series of discrete lessons with each lesson focusing on specific phonological, morphological and syntactic patterns of English. The lessons were taught in highly structured, formal pattern drills in which the teacher served as the language model, presenting sentences containing the items to be practiced. The children would repeat the sentences, attempting increasingly accurate repetitions. The idea was that by increasingly accurate repetitions of certain stimuli, in this case sentences and vocabulary, the language learners would memorize the basic patterns of English. They would then be able to substitute in other vocabulary that they would learn later. A goal of each lesson was the most accurate production of the stimulus patterns that the children could produce. Teachers were to correct for inaccurate pronunciation (the forms of the utterances) and to require multiple productions.

Over 12 years later, in 1980, an examination of commercial English as a second language materials reveals, basically, the same highly structured audio-lingual approach to teaching a second language to children. Although the newer programs may contain a wider variety of audio-visual extras, the basic approach is the same. In light of current research on second language acquisition in children, the validity of this approach appears to be in question. Therefore, this paper will examine the theoretical bases for this audio-lingual approach and some of the more recent research in second language acquisition which suggests that revisions in methodology are needed. Implications for what might be included in such revisions also will be offered.

The audio-lingual, aural-oral methodology has its theoretical foundations in two areas: One is the area of structural linguistics and contrastive analysis and the other is the area of stimulus-response learning theory. Structural linguistics describes the phonological, morphological and syntactic patterns for any language. Once these patterns have been enumerated, structural linguists

would suggest that teaching a language involves basically the examination of these patterns and the organization of them into a sequence of lessons. Contrastive analysis is a particular subdiscipline of structural linguistics which compares the linguistic structures of two languages. People working in contrastive analysis suggest that by comparing the structures of two languages one may predict which structures of the second language will be of particular difficulty to the second language acquirer based on first language background. For example, in the area of phonology (the sound system) the sounds of English and Spanish have been compared. In Spanish, there is no phonological distinction between /b/ and /v/. In English there is. Therefore, contrastive analysis predicts that Spanish speakers acquiring English will have difficulty both discriminating and producing those two sounds as distinct from each other. Similarly, in Spanish there is the phoneme /ch/ but there is no /sh/. Therefore, when they are acquiring English, speakers of Spanish may have difficulty both in discriminating those two sounds and in producing them in words. It is suggested that considerable practice on those items that have been predicted to be more difficult for second language acquirers should be built into second language programs (Wardhaugh, 1970).

Working in accord with the contrastive analysis hypothesis is the notion of stimulus-response learning, particularly as that position about learning is applied to language learning situations. The stimulus-response approach to learning holds that learning takes place as a stimulus is offered and responded to. The learner's responses subsequently are reinforced by the environment, which results in the making of ever closer approximations to the correct response. A cycle of stimulus-response reinforcement, another response and reinforcement and another response and reinforcement is set up. When this is applied to a language learning context, it becomes evident that stimulus-response theory corresponds to audio-lingual methodology in that the learner hears a pattern, is expected to repeat it, to hear it again and repeat it more accurately, until the repetitions approximate as closely as possible the model (Dulay & Burt, 1972).

In the late 1960's and early 1970's, second language acquisition researchers began to question both the contrastive analysis hypothesis and the stimulus-response approach to language learning/teaching. The questioning came from two groups of people. One group was the second language practitioners (teachers) who noted that students in their ESL classes would practice particular patterns, then would not be able to express themselves using the same patterns. The second language acquirers

made a lot of errors or "goofs" as they tried to use the second language (Dulay & Burt, 1972). The second group was researchers in first language acquisition, who in the 1960's had started to challenge the stimulus-response hypothesis about language learning. As people in native language acquisition research examined what children actually did as they acquired their native language, they challenged the idea of language learning being pure habit formation and stimulus response. Native language acquirers came to be identified as active participants in the processes of acquiring their own language. Children were found to be not simply imitating adult speech but generating, trying out, and refining their guesses about language.

Investigators in second language acquisition began to collect data on the performances, on the production of second language speakers. After they collected this data, they categorized the goofs, found the following categories of errors: (a) errors which did indicate an influence from the first language, in other words interference or transfer errors; (b) errors that could not be predicted from contrastive analysis, that is, errors that did not come from first language interference but which bore a remarkable resemblance to errors which native speakers made as they were acquiring their native language, developmental errors; (c) errors which could be traced neither to developmental patterns nor to contrastive analysis, unique errors (Dulay & Burt, 1972).

What is most important in the error analysis studies is the finding that the second language acquirer was going through processes quite similar to those of an acquirer of English as a native language. Second language acquirers, then, began to be viewed as active participants in the processes of second language acquisition. They were seen as persons who would produce a series of interlanguage grammars which exhibited characteristics of both the first and second language (Corder, 1975; Dulay & Burt, 1972, 1974; Hakuta & Cancino, 1977; Richards, 1973). Perhaps the most significant contribution of error analysis, then, was its emphasis on the need to see the second language acquirer in many of the ways that the first language acquirer was being viewed, as an active participant in second language situations rather than as a passive receptacle for the second language.

Moving beyond error analysis, second language researchers began to adopt a case study approach to second language acquisition research. Individual second language acquirers were identified and followed over a period of time. The data collected reflected changes in

both performance and in second language processing strategies over time, something that error analysis had not done. It became evident in the longitudinal studies that, as in the case of first language acquisition, linguistic goofs disappeared automatically but gradually. It can be said that the use of correct forms increases variably as a gradual process (Hakuta & Cancino, 1977). Interference probably does play an important part in second language acquisition, primarily in the earlier stages of second language acquisition. It appears that in the earliest stages, the second language acquirer hypothesizes that the second language is just like the first language (Corder, 1975). As the second language acquirer becomes more and more proficient in the second language, more of the errors reflect developmental errors rather than interference from the native language. The acquirer begins to process in the second language rather than through the first language (Cazden, 1975).

Error analysis also stimulated researchers to investigate the phenomenon of avoidance in second language acquisition situations. It has been suggested that in second language learning, contrastive analysis predicts contexts and structures that may, for a period of time, be avoided. In other words, these structures may not be produced by the second language speakers (Schacter, 1974).

The previously cited research is psycholinguistic in nature in that it attempts to draw conclusions about what is going on in the individual speaker's mind as he or she acquires a second language. The research examines the stages that the individual is going through and the strategies the individual is using.

Most recently, second language acquisition research has focused on the role of the "teacher" in the second language context, whether that teacher be adult or child. There has been an interest in considering the input data to the learner. Once again, research in native language acquisition has had influence upon second language acquisition research, particularly that area of native language acquisition research that has been labelled "motherese" or "baby talk." Many studies of motherese or babytalk, that register use by adult caretakers talking to young children acquiring their native language, have been done. Baby talk may be characterized as more repetitious than talk to adults, more geared to topics of here and now, and containing more questions and imperatives than talk to adults. Research indicates that adults interacting with young children adjust their speech in the desire to be understood by the child and to teach the child. These findings have been labelled the communication-clarification function of baby talk. Baby

talk also has an affective-expressive function, where the adult attempts both to express affection for the child and to capture the child's attention (Blount, 1977; Brown, 1977; Snow & Ferguson, 1977). It is, however, the communicative-clarification function that is of more interest in second language acquisition. Probably, many characteristics of motherese are exhibited in adult-child interactions in second language settings.

To date, only a few studies of adult native speakers interacting with child second language acquirers have been done (Hakuta & Cancino, 1977). Most of these have been done in naturalistic settings rather than in formal school situations. From these studies, it is possible to generalize that the speech addressed to second language children by native speakers resembles closely that of the speech of mothers to their own children. That is, the sentences tend to be shorter and simpler than sentences that would be addressed to adults. There are many repetitions in the speech of adults to a second language child, and many of the repetitions are based on comments that the child makes. The repetitions may be more accurate pronunciations of something the child has said. Frequently, they are questions (or involve a question intonation) or are repetitions of something the adult has said that needs clarification. Speech generally is restricted to here and now topics. Frequently, then, adults simplify and repeat both in efforts to make themselves understood and in efforts to understand what the child is trying to communicate (Hatch, 1978; Peck, 1978; Wagner-Gough & Hatch, 1978).

In a study that considered adult teacher input to a child in a school setting, the following examples of baby talk/motherese were noted: (a) the teacher frequently waited for the second language acquirer to open a topic and then the teacher would stay on that topic, (b) the teacher made extraordinary efforts to understand the child, particularly when only partial utterances were given, (c) the child began to offer more English, the teacher frequently repeated what the child had said and also expanded the child's partial sentences, and (d) the teacher also repeated frequently so that the child had the same input several times (Urzua, 1980). These studies, then, indicate that there may be close correspondences between what caretakers do with children acquiring their native language and what adults do with children acquiring their second language.

In most second language situations involving children, peers as well as adults become second language teachers. What are the roles of the peers and what is their input to the second language acquirer? After

taping a native speaker in several play sessions with a second language acquirer, Peck (1978) has noted that: Child native speakers of a language do not make the consistently concerted efforts that adults do to limit their input of English. It may appear somewhat contradictory to suggest that this partial lack of adjustment may also be helpful to the second language acquirer's increasing ability to deal with the second language. However, I would like to suggest that this is beneficial to the second language acquirer because it forces (in a positive sense) the second language acquirer to make increased efforts not only to be understood by the native speaking child but also to understand what the peer is saying. For different reasons, both adult and child input is extremely important to the second language acquirer.

The importance of peer input and of the acquirer's strategies for dealing with this input has been documented in a school setting. In a one year study of first grade Mexican children acquiring English as a second language in a public school classroom, Fillmore (1976a, 1976b) documented what the English speaking children did as teachers of non-English speaking children and how the English speakers coped with the language learning task. She noted that frequently native speakers of English modified their input to the second language acquirers. Fillmore documented that children who were most successful in acquiring a second language during that first year interacted extensively, using a variety of strategies. The study also demonstrated that the successful second language acquirers paid extremely close attention to what was going on in the classroom, both verbally and nonverbally.

These second language acquirers seemed to provide evidence in favor of Hatch's contention that, in acquiring a second language, the crucial variable is for the learner to have to attempt to carry on conversations in the second language. It is absolutely necessary for the second language acquirer to have to interact with people who are fluent speakers of the language the acquirer is trying to acquire (Hatch, 1978).

It should also be noted a special register has been identified in the speech of adult speakers of a language to adult acquirers of that language. This register has been called foreigner talk and has been described as a variety which is more simplified, slower, louder and more repetitious than normal speech. However, foreigner talk frequently includes topics that are not limited to the here and now. This variety of speech nas been documented not only in naturalistic settings but also in adult second language classrooms (Ferguson, 1975, Gaines, 1979).

A final contribution of studies of second language acquirers has been the identification of the importance of recognizing individual differences in second language acquirers (Fillmore, 1976b; Hatch, 1978; Schumann, 1976). Research has confirmed that no two people are going to be exactly alike in the rate at which they acquire a second language or in their attitudes towards the use of the second language.

What the research cited above makes clear, most generally, is that second language acquisition is an extremely complex phenomenon, involving linguistic, psycholinguistic and sociolinguistic variables. The following implications are evident:

1. Second language acquisition is much more than a stimulus-response phenomenon. Commercial materials do not reflect the complexity inherent in language acquisition.

2. Teachers should trust their instincts when interacting with children. They should feel free to use "motherese."

3. Emphasis should be placed primarily on understanding and reacting to what children are trying to communicate (the functions of the utterances) and only secondarily on the ways in which they express themselves (the forms of the utterances).

4. Acquirers must make errors while acquiring a second language. These goofs are a necessary part of achieving ability in a second language. Yet, second language materials suggest that error free performance is a primary goal and this notion should be reevaluated.

5. Topics of lessons should be of interest to the children.

6. The notion of real purpose is violated in second language lessons in which learners are expected to talk for the sake of practicing particular bits of language. Learners should be put into situations where they need to communicate.

7. Second language acquirers should be put in situations with fluent speakers of the language. Commercial materials recommend separating second language speakers, and this appears to work against the acquisition of language. Heterogeneous grouping is also effective in content and activities.

In sum, natural second language acquisition is somewhat different than second language learning in

classroom settings. In the former, the second language is acquired as the child copes with the environment; in the latter, teachers are put into the position of being asked to organize or implement programs. In my opinion, the most important thing a teacher can do is to take the communicative, survival focus of the natural setting and transfer it to the classroom.

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THE MUSICAL CLOZE PROCEDURE (MCP) FOR LANGUAGE DEVELOPMENT

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The cloze procedure is a technique for measuring communication. As defined by Taylor (1953), cloze is a message which has systematic deletions and requires reconstruction of its overall pattern. The procedure may be altered to suit a variety of objectives and populations (McKenna & Robinson, 1980). Most recently, cloze has been used as a teaching strategy to improve the comprehension skills of students.

The first part of this study cites research on using the cloze procedure for language development and vocabulary expansion. Also mentioned in this section are studies on using music as a means of aiding language and reading skills. The last portion of the paper lists the steps on using the musical cloze procedure (MCP).

Cloze

Thomas (1978) suggested that cloze be used to (a) enhance the use of context and content clues, (b) promote functional application of general phonic knowledge, (c) comprehend function words (articles, prepositions and conjunctions), and (d) perceive relationships of organizational patterns (e.g., simple listing, comparison/contrast, cause and effect).

Gamberg (1976) employed cloze in an effort to encourage readers to seek meaning. Lesson formats included ideas for instructional use. Kaminsky (1979) argued for employing cloze to observe readers' strategies in extracting meaning from written language. She assumed that a successful reader depended on accurate or appropriate predictions. An extension of this principle was earlier endorsed by Dale (1975). He recommended teaching students to use context structural analysis to predict and guess meanings.

A study team (Bortnick & Lopardo, 1973) found cloze to be an effective method of teaching word recognition

skills. The results of a study conducted by Kennedy and Weener (1973) supported the hypotheses that visual and auditory training with the cloze procedure improved reading and listening comprehension.

In-depth empirical research was conducted by an international team to explore the effectiveness of cloze as a measure of comprehension across three languages: English, Japanese and Swedish. Three important conclusions were reached, (a) the cloze procedure provides a valid and reliable measure of reading comprehension, (b) a reader must be able to utilize redundancy of written language which is at different text levels, (i.e., phrase, sentence and paragraph), and (c) a certain level of comprehension is necessary before overall understanding can develop (Grundin, et al., 1976).

The cloze procedure presented an instructional problem when used with first grade students. It was difficult to establish reading levels which provided goodness of fit between passages and students (Ranson, 1968). A later presentation, however, offered several suggestions for getting started and keeping it going with first graders (Gove, 1975). Much of the emphasis was placed on auditory practice in order to prepare students for visual competency.

Studies have used the cloze technique in various ways to augment vocabulary and to increase general knowledge of language. One such study, for example, was conducted during a five-week summer program during which 44 students were taught how to supply missing words in passages in order to obtain meaning from text. The students learned about semantic and syntactic interactions in language to arrive at meaningful content. The cloze procedure was employed as both an instructional tool and as assessment device for pre- and post-testing (Sinatra, 1977).

Recommendations to delete content words (nouns, verbs, and adjectives) rather than following the usual nth patterns proved successful as activities for primary students. Moreover, the enthusiastic responses from young children when they engaged in predicting and supplying words were recorded. This activity proved as effective when done orally as it did when presented in graphic form (Blachowicz, 1977). Gove's cloze strategies revealed effectiveness in helping first graders to better understand language patterns (1975).

Results of parallel research on vocabulary development supported the theory that learning new words is best accomplished by using context clues and by associating target words with familiar synonyms (Fillmer,

1977; Gipe, 1979, 1980). These methods proved significantly superior to categorizing and dictionary activities.

Kurth (1980) claims that a more reliable method for learning new words is by having the students use the unfamiliar words in meaningful context and categories which helped students see the relationships between words. This method stimulates discussions among students encouraging them to use their language with more variety and precision.

Music

Lauritzen (1980) recommended oral literature as a medium for aiding in language acquisition. Songs, stories and poems in the oral tradition were offered as an ideal transition from being a listener to being a reader. Three linguistic patterns were identified, (a) repeated wording, (b) repeated syntax, and (c) combinations of the first two. Early results of longitudinal studies revealed that listening ability, of all the language behaviors, was most highly correlated with school success (Ruddell, 1980).

It was noted in a study by Uhl (1969) that children engaged in musical activities such as singing and listening, developed better listening skills and their aesthetic appreciation was enhanced. Also mentioned in Uhl's study was that music appeared to help children learn to attend for longer periods of time.

In a more recent study, Zinar (1976) obtained positive correlations between language reading and music reading abilities. Lloyd (1978) observed and charted musical activities for beginning readers to help develop and reinforce their language reading abilities. The evidence emanating from those observations was that musical activities seemed to aid children in the learning of reading language.

Musical Cloze Procedure

The conclusions drawn from research on the cloze procedure, language development, and music study have yet to be integrated into a teaching format. In order to operationalize the research findings into a generative and systematic teaching technique, the Musical Cloze Procedure (MCP) was developed.

The MCP applies a cloze format to musical selections. It is a teaching strategy that can incorporate variations of cloze formats in conjunction with songs in order to expand students' language. The function of the MCP is to motivate students to become active participants in lessons that augment their language knowledge.

Steps in the Musical Cloze Procedure (MCP)

Selection of a song. Select a song that is fun, interesting, easily learned and related to prior experiences. It is especially effective if the song fits into a thematic unit of the curriculum. For example, songs about elephants, bears, and frogs match the theme of an animal unit.

Selection of target deletions. Deletions are based on goals of vocabulary expansion, song structures and student characteristics. Omissions may be parts of speech, concepts, or relational expressions (e.g., rhyming words, alphabetic progressions, categories, classifications, synonyms, antonyms or homonyms). Phrases may be parts of lines, whole lines, restrictive and nonrestrictive clauses or sentences.

Presentation of song. The teacher sings the whole song. The lyrics may be presented on a language experience chart, a ditto sheet or an overhead projector. The teacher and students practice a verse at a time and sing the whole song until it is learned. The timing of this may occur in one sitting or over a period of days.

Presentation of musical cloze. The teacher sings a verse in tact. The teacher and students sing a verse in tact. Then, the teacher sings a verse with deletion. Students supply alternatives for the deletions. Students' suggestions are recorded so that all students can see and read them. The teacher and students sing modified verses based on the students' suggestions.

Class discussion. The teacher leads a class discussion which investigates the students' suggestions to fill target deletions. This questioning period was designed by Gove (1975):

> Why did you choose this word? What word or group of words indicate to you "building" should be in the blank? How does your word contribute to the meaning of the passage? When your word is in the sentence, what does the sentence (the passage) mean? How does your word contribute to the meaning

> in a different way? When your word is in the sentence, does the sentence (or passage) have a difference meaning? (p. 38)

Further delineation of vocabulary and thinking can be carried out in small group discussions, class debate or a class music book of continuing vocabulary suggestions made for songs.

Summary

Findings from three areas of concurrent research, cloze, language and music exhibit similar conclusions. Interrelationships exist for using cloze and music for language development with elementary school students. The Musical Cloze Procedure (MCP) is a pedagogic strategy which incorporates cloze and language development.

There are three major steps in the MCP. The first step consists of selecting the song and target deletions. Presenting the song in tact, followed by the song with the deletions comprises the second step. A class discussion culminates MCP activities.

Musical Cloze Procedure represents a balance between theory and practice. The blending of music and language encourages a natural, pleasant setting for the development of vocabulary.

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ANOTHER CHALLENGE: READING IN THE PHYSICAL EDUCATION CURRICULUM

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Rationale

Many educators ask the question, "How can a P.E. teacher possibly fit into an all-school secondary reading program?" Physical education teachers especially ask this question with concern and sincerity. I've explored this question with 100 teachers-in-training at Arizona State University. With their knowledge of the area of physical education and my background in the field of reading instruction, we discovered the following practical and realistic teaching strategies that can be successfully integrated into P.E.

There is now a trend in the philosophy of physical education that has much in common with the philosophy of reading instruction. According to Straub (1976) the general goal of physical education is to equip students with skills, attitudes, and knowledge that will enable them to participate in sports throughout life. To achieve this, the following goals are pursued:

1. development of organic power
2. development of neuromuscular skill
3. development of desirable personal and social attitudes
4. development of intellectual awareness
5. development of recreational competency

These goals are similar to the ultimate goal of all reading instruction which is to develop independent, critical and creative readers. With this shared commitment, the suggested teaching practices take on a different perspective. They begin to belong in the P.E. curriculum instead of being seen as add-ons or token activities.

In general, there are three ways P.E. teachers can realistically integrate reading/thinking improvement practices into their teaching. Activities can be planned that will (a) stimulate recreational reading by capitalizing upon interest in sports, (b) reinforce vocabulary and comprehension skills by helping students transfer these skills to P.E., and (c) provide reading

opportunities through alternative learning options such as individualized instruction techniques.

Methods

Physical education teachers are especially jealous of their instructional time. Most high schools and junior highs have a 50 minute period. After time for dressing out, roll call, warm-up exercises, cool-down exercises and showers are subtracted, little actual instructional time is left. Any reading activities have to be short and take little classrom, gym, or field time. The following suggestions keep this limitation in mind.

Stimulation Activities

Locker-room library. There are numerous ways to stimulate and encourage reading in the content area of physical education. The most obvious way is to capitalize on the sports interests of students to get them to read more. Even though many P.E. teachers recommend specific books to individual students, they can do more. They can start a locker-room library, the P.E. variation of the classroom library. This library should include bibliographies, autobiographies, fiction, non-fiction, how to pamphlets, reference books and magazines. Obtain books on the variety of reading levels. Companies such as Scholastic and Pyramic have high interest-low vocabulary sports libraries available.

The following articles contain lists of books available in specific sports:

Boston, Richard G. Sports literature. English Journal, January, 1975.

Fader, Daniel, et al. The new hooked on books. New York: Berkley Medallion Books, 1976.

Nygard, Gary. Sport in contemporary literature. Journal of Physical Education and Recreation, 1976, 47, 20-23.

Miller, Arthur, & Massey, D. A dynamic concept of physical education for secondary schools. New Jersey: Prentice-Hall, Inc., 1963.

Patlak, Sandy. Sandy's 99 sports books for reluctant readers. Fusing reading skills and content. Delaware: International Reading Association, 1969.

Interest inventory. To ascertain the reading interests of students in the field of physical education or a specific sport, reading/P.E. interest inventories can be developed and administered. The following items are samples from an inventory of football interests:

1. Do you watch football on television?
2. Who is your favorite football player?
3. What position do you like to play the most?
4. Have you ever read a football book?
5. Do you read the sports' page in the newspaper?

After the student has read a book, a book sharing activity may be effective. By using creative book reports or oral reports, the whole class is exposed to the book and perhaps another student will become interested. The following options work well for book reports in P.E. and can decorate the locker-room as well: Dioramas, maps, pop-up books, timelines, table displays, collages, models, book jackets, posters, billboard advertisements, magazine advertisements, peep-boxes, montages, mobiles, bookmarks, comic strips and roll movies.

Use bulletin boards to encourage students to read magazines and newspapers (Patlak, 1972).

Reinforcement Strategies

Vocabulary strategies. Each sports unit in the physical education curriculum has its own specialized, technical vocabulary. It is the responsibility of the P.E. instructor to teach these vocabulary words. Many of the words have multiple meanings, or different meanings in other disciplines. Some even have different meanings in other sports. Words such as center, line, drive, love, pitcher, forward, and goal mean something entirely different in content areas. Trap has different meanings in baseball, soccer, football and basketball.

Physical education has its own jargon. Sports have added words such as rain check, wiped out, and zap into our general vocabularies. Sports media have created new words such as slo-mo, split screen, and instant replay. Abbreviations abound in P.E. in the scoring, directions, handouts and playbooks. Abbreviations such as RBI, SB, PH, and SF can make baseball incomprehensible. For more interesting insights into the language of physical education refer to Frommer (1979).

Structured overviews can be used to introduce important vocabulary or to review words. A structured

overview is a graphic representation of vocabulary that reflects the relations among terms. This example was developed to introduce a badminton unit.

Games can be used successfully as reinforcement for vocabulary lessons. Games shouldn't be seen only as a rainy day activity. The stand-bys of bingo, word searches, crossword puzzles, password, concentration, are easy to adapt. Board games can be modified for several units.

Comprehension strategies. The most promising comprehension stragies are the directed viewing lesson, the study guide, and the use of effective P.E. handouts.

The directed viewing lesson is a lesson plan which adequately prepares and develops comprehension of filmstrips, film loops, movies, video-tapes, demonstrations, or any viewing activity. Structuring the lesson around the five following steps ensures maximum understanding and retention of the information given:

I. Preparing for viewing
   A. Motivate
   B. Preview main points
   C. Introduce important vocabulary
   D. Establish purpose for viewing
   E. Ask guiding questions

II. Viewing the presentation

III. Developing comprehension
   A. Major concepts mastered
   B. Study guide
   C. Oral discussion

IV. Reviewing

V. Follow-up activities

The study guide of a directed lesson is more than a list of questions. It can be a multi-level questioning guide with questions on all four levels of reading and thinking comprehension (literal, interpretative, critical, and creative). It can be a process guide which reinforces a particular comprehension skill needed to organize the information presented. In P.E., process guides usually cover sequence, cause and effect, comparison and contrast, predicting outcomes, and inferring meaning.

A P.E. sports handout can help students comprehend and remember information about a given sport. Many P.E. teachers use them to substitute or supplement oral instruction. They are used either at the beginning of a unit, as introduction, or at the end of a unit, as review. They usually contain information concerning the history of the sport, a glossary of important terminology, procedures, rules, regulations, safety tips, scoring information and equipment. The handout should be written at the readability level of the majority of the students.

A glossary of specialized and technical physical education terminology is very important. The following suggestions for presenting a glossary should enhance its usability:

1. For specialized vocabulary words that have multiple meanings, a definition alone is not sufficient. The context of the word (or a sentence providing an example of how the word is used in physical education) should be provided with the multiple-meaning word underlined.

2. For words that have an interesting or odd word history, provide the definition and a brief summary of the origin of the word.

3. For terms that are actually acronyms (the first letter of several words, such as SCUBA) include these words in the glossary and provide the entire explanation of the letters.

4. For terms that are actually abbreviations, such as BA, RBI, and PH, include these words in the glossary and provide both the explanation and a definition.

5. For terms that are difficult to pronounce, provide in parentheses the dictionary pronunciation aids.

The use of diagrams, charts, graphs, illustrations and score cards will help the student visualize explanations of procedures. Draw appropriate illustrations next to the paragraph explanation.

To encourage individual reading for additional information and recreational reading about the sport, add a few book titles for reference and a few book titles of biographies or autobiographies of famous athletes who participated in the sport.

Use as many study aids as are practical. Underline important words of phrases, use different coloring, summarize main points, use column spacing for note-taking and study, and provide information which will help students with exams.

Provide Reading Opportunities Through Alternative Learning Options

Teaching methodology in physical education is beginning to incorporate principles and practices of individualized instruction. Many of these practices include reading options that can be integrated into the P.E. curriculum.

Contracting. The idea of contracting for a specific grade on a sports unit by accumulating a certain number of points through the choice of available learning activities is proposed by Rushall and Siedentop (1972). They suggest the following reading and writing options with a bowling contract:

> Observe the Ft. Pierce Women's City Bowling Tournament for an hour of league bowling. Report in writing how this type of bowling differs from open bowling.
>
> Work the bowling crossword puzzle found in this packet.
>
> Make a poster showing a lane diagram. Enlarge and make off-set drawings of the approach area and the pinfall area. Write a short paper telling of

the use one could put this information to when bowling.

Compile a list of at least 15 bowling terms and give a definition of each.

Watch a professional bowling match on TV, on Saturday afternoon at 3:30 on Channel 4. Write a one page report on your observations.

From the enclosed rule book put out by WIBC, find out what special prizes are given in sanctioned leagues. Illustrate the patches and/or pins and explain what they are given for.

Read a book on bowling and give a brief resume of the contents. Write a critique of the book.

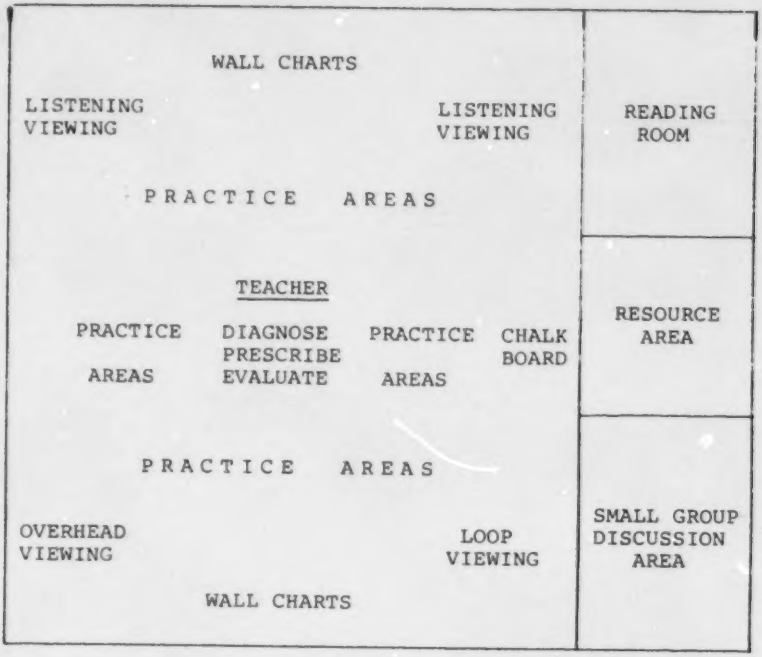
Secure a bowling film and show to your class. Prepare a 10 question quiz over film and administer to class.

Research and write a paper on the history of bowling using at least three resources. The paper should be double spaced, preferably typed, and should include a bibliography.

Take a written multiple choice examination over bowling which will cover the following: Etiquette, scoring, handicaps and averages, technique, terminology, history. You must score 85% or above to receive the contract point value.

Learning stations. Another alternate learning approach is suggested by Carl Willgoose (1979). He suggests the use of learning stations to provide variety and individualization of instruction. The following diagram shows the classroom organization.

Each station has a task card which states the behavioral objective, a pre-test and post-test, and learning activity to be accomplished. The teacher(s) and aide(s) assist and evaluate student performance.



Alternative Learning Activities for Non-Participants

A Physical Education teacher needs some alternate learning activities for students who cannot participate in physical activities. A preliminary survey I conducted indicates that this is a constant problem. Alternate learning activities could benefit these students. They could learn about a sport and do assignments even if they cannot perform the skills. Learning centers, alternative learning packets (ALP), newspaper assignments and library assignments can be used for this purpose.

A learning center can be located either in the P.E. teacher's office or in the library. It is a self-contained, independent learning activity complete with instructions, learning exercises, and guidelines for self-evaluation. In P.E. a learning center can be developed on a certain sport and be available during that unit. Such a center adds variation and provides an opportunity to encourage independent study (Steurer, 1978).

An alternative learning packet (ALP) is an individualized self-instructional package of information, exercises, diagrams, references, and evaluation. It may be programmed; it may not be. It is similar to unipacs, LAP's, and other individualized learning modules. A learning center differs from an ALP in that it usually has an attractively displayed poster board. The ALP is all on paper.

The daily newspaper can be a teaching resource for the P.E. teacher. The following assignments can be given as extra-credit options for students who do not participate.

1. The student will explore and identify a sport with which he/she is unfamiliar and write a short summary of that sport.

2. The student will compare articles about the sports activities of males and females, noting the frequency and length of the articles. The student will state the differences and similarities of the articles.

3. The student will follow one professional team, cutting out pertinent information. The student will organize the information and summarize it.

4. The student will observe advertisements for sports equipment and compare appeals and propaganda techniques.

5. The student will pick a national basketball player and follow his career through the season. The student will develop a log from week to week, identifying the player's performance, statistics, and his team's record.

Additional ideas can be found in the following references:

Newslab. Palo Alto, CA.: Science Research Associates, 1972.

Piercey, D. Daily text for thinking. The Arizona Republic & Phoenix Gazette, Phoenix, AZ., 1970.

Sargent, E. The newspaper as a teaching tool. Conn.: The Reading Laboratory, 1975.

Verner, Z. Newsbook of reading comprehension activities. Houston, Texas: Clayton Publishing Co., 1978.

If a student is unable to participate for a week or more, library assignments may be appropriate. An effective library assignment contains activities that require reading and thinking on the four levels of comprehension. References should be included to help the student locate the necessary material. Sample activities from a golf unit follow:

1. a cloze exercise on vocabulary
2. questions on general information about the sport
3. compare and contrast two major golfers using at least two magazines and books
4. choice of art projects--design a golf course, make a collage, make a billboard advertising a tournament, knit a club head.

This paper has presented many suggestions for promoting reading in conjunction with the physical education program. All of these ideas, methods and practices have been successfully tried in P.E. classes by student teachers. It is my hope that as these student teachers become teachers themselves, they will help spread this new challenge of reading in the physical education curriculum!

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PRE-READING STRATEGIES FOR CONTENT AREAS

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The concept of readiness has long been an accepted tenet of reading instruction. Nila Banton Smith's American Reading Instruction (1965) traced the crystallization of the readiness concept back to John Dewey in the first quarter of this century. In 1949, Hildreth defined readiness in two different senses: "1. With reference to the child's maturity for the beginning period in school; and 2. With reference to a pupil's specific preparation for new learning at any stage in his progress" (p. 57).

In this definition, readiness has been treated as a precept to be used for all students at any level. Yet, readiness is commonly associated only with kindergarten and primary age children. Part of this misconception about readiness is based on the assumption that students have learned to read by the time they begin dealing with content textbooks. If you ask any middle school or secondary teacher about the students' ability to read their textbooks, you will learn how unrealistic that assumption is!

More recent research has also pointed to the importance of readiness, specifically in reference to learning from text. Research by Rothkopf on mathemagenic behaviors (1965, 1972) and by Ausubel on advance organizers (1968) emphatically pointed to the necessity of providing pre-reading experiences to enhance cognitive readiness, comprehension and subsequent learning efficiency. Rothkopf (1970) defined mathemagenic behaviors as those activities which help students achieve previously specified instructional objectives. He found that students' reading behaviors could be shaped to fit certain tasks. Ausubel (1968, 1978) based his research on the concept of meaningful verbal learning. According to his findings, advance organizers maximize learning by helping students associate new information with prior knowledge.

The importance of pre-reading strategies to aid in learning from text has also been emphasized in a line of research investigating mental schema and its effect on processing connected discourse (Anderson, Spiro, & Montague, 1977). Schema has been defined as one's pre-existing knowledge, or "a kind of mental framework based

on cultural experience into which new facts are fitted" (Clark & Clark, 1977, p. 168). Schema is also used to process new information by allowing learners to predict aspects of new concepts which have not been directly stated (Neisser, 1976). Comprehension occurs by activating appropriate schema and then modifying them as new knowledge is entered.

Rumelhard and Ortony (1977) have proposed a "top-down" model of reading that considers schema crucial to the reading process. Top-down processing requires activation of schema to form conceptual expectations within which new learning takes place. Reconstructing prior knowledge from their mental framework permits learners to associate new information to known information. It also permits them to make assumptions about new concepts which are not explicitly stated in the incoming information. Failure to adequately utilize existing schema deters or inhibits learning.

This diverse input from traditional reading instruction and research by educational and cognitive psychologists indicates that readiness is also an important part of teaching in the content areas. The concept load, technical vocabulary, and complex sentence structure of content textbooks makes provision of readiness instruction a necessity if we expect students to learn efficiently from their textbooks (Readence, Bean, & Baldwin, in press).

Fortunately, content teachers have at their disposal numerous strategies which will acquaint students with new vocabulary and motivate their predictive understanding before they are asked to attempt difficult reading tasks in content areas. Such readiness strategies insure an active, top-down processing of content area assignments (Readence & Moore, 1978).

Readiness, or pre-reading, strategies may be classified into two groups: (a) vocabulary strategies, and (b) prediction strategies. These pre-reading strategies have differing degrees of teacher-domination and student involvement. In teacher-dominated strategies, the teacher provides most of the information while in student-dominated strategies the bulk of the discussion is carried on by students with the teacher acting as a facilitator.

Vocabulary Strategies

Graphic Organizer

The graphic organizer, or structured overview, is a schematic diagram of major vocabulary terms constructed by the teacher (Earle & Barron, 1973). It attempts to convey the important ideas to be found in students' reading by providing a framework of inter-relationships among the terms. Research indicates that graphic organizers are most effective in helping students master new vocabulary (Readence & Moore, 1979). Additionally, a graphic organizer can serve as a reference for students throughout a lesson.

To construct a graphic organizer, the teacher first performs a content analysis of the material to be read. Major ideas in the material are identified. Since mastery of these ideas requires knowledge of the words that convey their meaning, the teacher selects the major vocabulary subsumed by the ideas. These terms are then arranged in a visual display which illustrates the inter-relationships between the terms and the ideas they convey. Once the organizer has been constructed, previously learned vocabulary terms may be added to the visual display. These known vocabulary terms are added to enhance students' understanding of the graphic organizer. Next, the teacher evaluates the completed organizer to make sure the diagram accurately illustrates the ideas to be stressed in teaching the lesson. Finally, when presenting the graphic organizer to students, the teacher should thoroughly explain the arrangement of the terms and encourage students to contribute additional information. This student involvement may facilitate understanding of the graphic organizer as information is drawn from prior knowledge.

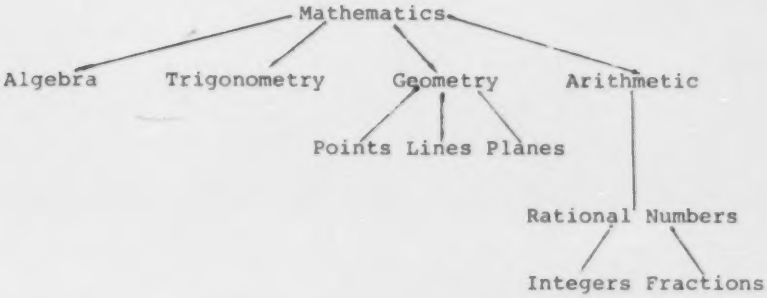
The following unit on mathematics is presented to provide an example of a graphic organizer with its accompanying key ideas and key vocabulary (adapted from Earle, 1976).

Key Ideas

1. Mathematics is a science consisting of many fields.
2. Arithmetic, a field of mathematics, concerns itself with rational numbers.
3. Geometry, another field of mathematics, is concerned, not with numbers, but rather points, lines, and planes.

Key Words

Mathematics	Algebra
Geometry	Rational Numbers
Points	Integers
Lines	Trigonometry
Arithmetic	Planes
Fractions	



List-Group-Label Lesson

The List-Group-Label lesson was originally conceived by Taba (1967) as a vocabulary development activity in social studies and science classes. It is based upon the use of categorization as a way to help students organize verbal concepts.

Briefly, the lesson begins with the teacher supplying students a one-word stimulus drawn from their experiences or from the materials they are using. Next, students develop a list of words or expressions that they associate with the stimulus word. Initial associations to the stimulus word promote more associations by other students, creating a spiral effect. Students responses are recorded by the teacher until the list totals approximately 25-30 words. Students are next asked to construct smaller lists of words from the large list and to provide a label for each grouping. Approximately three-to-seven words should be in the smaller groups, and students should be asked to verbalize why they have grouped words in a particular manner.

When used as a pre-reading strategy, the List-Group-Label lesson can effectively mobilize students' schema and thereby enhance comprehension. As an example of how this pre-reading strategy works in the content areas, the stimulus word geometry will be demonstrated as it was actually used in a seventh grade math class. The students had a brief introduction to geometry in the sixth grade. The seventh grade curriculum called for a more lengthy study of the subject. To reintroduce the unit, the teacher used the format of the List-Group-Label lesson. The students generated the following list of words:

Stimulus Word: Geometry

square	rectangle
cubic centimeters	triangular prism
math	base
volume	side
area	cylinder
cube	prism
pyramid	face
cone	edge
sphere	corner
symmetry	congruence
ruler	surface
protractor	compass
square inches	circle
equilateral triangle	

The students next made smaller groups of words from the list and then labeled them. The following are examples of those groups:

Geometry Groups

1. Protractor, ruler, compass = measurement tools.

2. Sphere, cone, circle, cylinder = curved surfaces.

3. Square inches, volume, area, cubic centimeters = forms of measurements.

4. Cylinder, cone, prism, cube, pyramid, square = things that have faces.

5. Prism, cone, cube, triangular prism = space figures.

6. Square, sphere, corner, volume, circle = words with six letters.

7. Side, symmetry, square, square inches, surface = words beginning with s.

As can be seen, the majority of the groups are based on semantic associations. It should be noted, however, that the last two groupings are based upon surface level, graphophonic cues rather than semantic cues. This is not the desired outcome of the List-Group-Label lesson even though such associations might serve as important mnemonic devices for some students as they deal with text material. The purpose of this lesson is to stimulate meaningful word associations thereby activating students' schema prior to reading the text.

Possible Sentences

Possible sentences is a combination vocabulary/prediction strategy (Moore & Arthur, 1979). Thus, it bridges the gap between the classifications used in this paper. This activity is designed to acquaint students with new vocabulary they will encounter in their reading and, additionally, to guide them as they attempt to verify the accuracy of the statements they generate. Additionally, it arouses curiosity concerning the passage to be read.

Initially, the teacher lists the essential vocabulary terms from a text selection on the board and pronounces the words for the students. Students may also volunteer words associated with the topic. Students are then asked to pair any new words from the list and formulate a sentence using them that they think might be in the text. The sentence is recorded verbatim and the words from the list are underlined. The sentences should be recorded exactly as stated even if the

information is not correct. The eliciting of sentences from students continues. Other students may use words already placed in sentences as long as a new context is created. The recording of the sentences ceases after a specified period of time or until the students can produce no more.

Next, the students are told to read the text selection in order to verify the accuracy of their sentences. After the reading, a discussion ensues concerning the evaluation of the sentences. The text selection may be used as a reference. Sentences are evaluated according to their accuracy, and those that are not accurate are refined or omitted. Such a discussion calls for careful reading, and judgments of the accuracy of the generated sentences must be defended.

After the original sentences have been evaluated and modified, the teacher asks for new sentences. New sentences are generated with the intent of extending students' understanding of the text concepts. As these sentences are dictated, students check them for accuracy and use the text selection for confirmation. The final acceptable sentences are then recorded by the students in their notebooks.

Possible sentences provides students an opportunity to practice their languaging skills. Using their experiential background, students think of possible associations new vocabulary terms may have and evaluate them. They speak to express their associations and listen to others' thoughts and associations. Finally, they read to verify the possible combinations. Thus, students are actively involved in new learning. Additionally, teachers can see the degree of prior knowledge students possess on a particular topic and how well students are able to modify that knowledge upon reading the text.

Prediction Strategies

Survey Technique

The Survey Technique (Aukerman, 1972) is a whole-class adaptation of the SQ3R study method. Students are instructed to analyze the various parts of a text chapter to formulate purposes for reading. This pre-reading strategy has the following steps:

1. Analyzing the chapter title
2. Analyzing the subtitles
3. Analyzing the visual aids
4. Reading the introductory paragraph

5. Reading the concluding paragraph
6. Deriving the main idea.

More specifically, before students begin to read an assigned chapter, they analyze the chapter title to discuss what might be included in it. Next, students skim through the chapter to locate and read any subtitles. It is suggested that the class devise a question to be answered by reading that subsection. Students than analyze the visual aids of the chapter by interpreting graphs, maps, and/or charts for the gist of the information they summarize. Pictures are discussed to determine what they represent.

Next, students are asked to read silently the introductory and concluding paragraphs of the chapter. Usually these paragraphs provide readers some general ideas about the chapter. A brief discussion following their reading is recommended. In addition, the students might examine the post-reading questions provided at the chapter's end. By this time, students should have a relatively good idea of the chapter's contents, so the Survey Technique is ended by having the students list ideas to be discussed in the chapter. From this list, a main statement is developed about the overall theme of the chapter.

At this point, students are prepared to enter the text more thoroughly in an effort to verify their prediction of the overall theme. Aukerman states that this pre-reading strategy takes approximately one-half hour of instructional time in the classroom. He recommends that a time limit be imposed once students are familiar with the procedure. The time restriction necessitates skimming for the information which is central to the Survey Technique. Students can then independently survey the text chapter to ascertain information. A whole group discussion would follow to pool the various ideas derived by students, again with the generation of a main idea as its culmination. It is stressed however, that no matter what time limitations are used, the strategy should result in students achieving a state of cognitive readiness for reading text.

ReQuest

The ReQuest Technique was developed by Manzo (1969) to encourage students to set purposes for reading and aid them in formulating their own questions about the material they read. The technique centers around the premise that active involvement by students in the comprehension process is enhanced if students are given the opportunity to ask questions prior to reading. During ReQuest,

students and teacher silently read portions of text material and then take turns asking and answering questions concerning that information. It is the reciprocal nature of the questioning sequence that differentiates ReQuest from other teacher-directed strategies and provides the format for active involvement on the part of the students. The ReQuest technique consists of the following steps.

1. Preparing the selection
2. Readying the students
3. Developing questioning behaviors
4. Developing predictive behaviors
5. Silent reading
6. Discussion of the reading

In preparing the selection for ReQuest, the teacher must be careful that the difficulty level of the material is suitable for the students. Additionally, the teacher must decide how much material will be read at one time. The ability and maturity levels of the students will dictate the amount of text to be read. Finally, the teacher identifies appropriate points in the text where predictions will be elicited.

Readying the students consists of communicating to them the guidelines, or rules, for ReQuest. It may also be necessary to acquaint students with new vocabulary to be encountered in the selection and to create interest or develop background for the reading.

Following joint silent reading, questioning behaviors begin with students first asking questions of their teacher. The teacher answers students' questions and serves as a model of good questioning behavior by asking thought-provoking questions in turn. The reciprocal nature of questioning in this technique is what differentiates ReQuest from traditional questioning strategies as used in the Directed Reading Activity.

When a sufficient amount of the text has been read, predictions about the outcome of the selection are elicited from the students. Students must provide justifications for their predictions. Students are then told to read the rest of the selection to see how the author dealt with the outcome. A discussion of the reading follows with the prime focus being the reconsideration of the students' predictions with regard to the selection's outcome.

With students formulating their own questions about a selection and trying to construct questions to extend the teacher's thinking, it can be readily seen how actively involved students must become before the actual

reading of the material. Eliciting students' predictions serves as the culminating part of this pre-reading strategy as it forces students to tie together what they have read in order to make those predictions. Students then read with enhanced cognitive readiness as they attempt to verify their predictions.

Anticipation Guide

The anticipation guide (Bean & Peterson, in press; Herber, 1978) is a variation of a study guide. It is designed to enhance comprehension by encouraging students to make predictions concerning major ideas found in the material to be read. In using this pre-reading strategy, teachers perform a content analysis of an appropriate passage to decide what major ideas are present. Statements are then created to both support and contrast with the author's ideas. These statements can be straightforward or may require some self inquiry on the part of the student. In either case, the questions should be designed to capitalize upon the prior experiences of students.

The statements are set down on paper and given to the students who then react to each statement before reading the assigned passage. Students are asked to agree or disagree with each statement and to be prepared to defend their thinking. A short discussion should follow to acquaint students with other points of view and to help crystallize their own. An example of an anticipation guide is given below. It deals with a poem by Susan Polis Schutz (1973) entitled, "When I Become a Young Mother."

You	Author	
___	___	1. A woman's place is in the home.
___	___	2. Any thoughts of a career for a woman, once she has had children, are doomed to fail.
___	___	3. The life of a housewife is boring.
___	___	4. Being a housewife is as worthwhile a career as any.
___	___	5. Once a woman has become a mother, she will never be able to resume the life she had before.
___	___	6. There is creativity and pleasure in being a housewife and mother.

When I become a young mother,
will my life be centered in the kitchen?
Will I listen to the day's activities of my family
and have nothing to say about mine?
Will I dream about a career I could have had?
Will I lose my creativity and become bored with life?
When I become a young mother,
why can't I live the life I did before?

After reacting to the anticipation guide, the students read the selection. Then they respond to the statements again, this time to decide what the author's viewpoint would be on each statement. A thorough discussion should follow these exercises to insure mastery of the selection that was read. Agreement with the author's ideas is not mandatory; rather, the purpose of the anticipation guide is to prepare students to read with specific purposes.

In summary, whether teachers use vocabulary strategies or prediction strategies to enhance students' readiness to learn new ideas in content area reading, it is imperative that the utility of pre-reading strategies be recognized. With the variety of such strategies available to teachers for use in their instructional lessons, reading in the content areas can be both profitable and exciting for students.

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AN EVALUATIVE PROCESS FOR CONTENT TEXTBOOKS

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While engaged in a multi-disciplinary research project designed to study literacy development at the Community College level,* it became necessary to develop a system for evaluating text materials used in subject matter classes. Of primary importance was establishing a set of procedures and accompanying instrumentation which would serve both a descriptive and prescriptive function. It was decided that the descriptive properties should be met by subjecting a given text to evaluative criteria that have either empirical or ecological validity established through previous research or field application. The prescriptive properties, on the other hand, would involve analyzing specific textual features, and then hypothesizing about their probable effects on the learner's ability to function effectively with the material. In other words, the process would take into account the totality of the text, the learner who would be using the text, and the classroom teacher's approach to the use of the text. As a result, we developed both a process and a tool which we believe have practical as well as research value. The nature of this process and a description of the tool developed is the subject of this paper.

Process

Phase I

An analysis of the textbook along several featural dimensions has been implemented. These dimensions include criteria that various authorities have indicated are likely to facilitate text comprehension. The characteristics of textbooks evaluated in this phase have been assembled in check list or chart form in Table I. The facilitative effect of these criteria assumes that the learner is fully competent to make use of these features and he/she appropriately applies these competencies while using the text to learn content. If either

*The author has been associated with this project, sponsored by the National Institute of Education through an award to the Department of Higher and Adult Education at Arizona State University, for the past two years.

Table 1

Textbook Checklist

I. Format Features

Criteria	Yes	No	Description or Commentary
1. Preface or Introduction to Text			
2. Table of Contents			
3. Glossary (Type)			
4. Index (Type)			
5. List of supplemental, suggested readings or additional references			
6. Special components: Table of Contents (types)			
7. Introductions:			
A. Units			
B. Chapters			
C. Guiding statements in above?			
8. Summaries:			
A. Units			
B. Chapters			
C. Consistent with guiding statements?			
9. Special components (Identify)			
A.			
B.			
C.			
D.			

Additional Comments:

Table 1 (Cont.)

II. In-Text Aids

Criteria	Yes	No	Description or Commentary
1. Illustrative Materials (types)			
A. Photographs or drawings			
B. Charts, graphs, diagrams			
C. Maps			
D. Timelines			
E. Tables			
(Features) A. Instructions given on how to read (A) through (E) above (clarity)			
B. Contiguity to text			
C. Signaling devices?			
D. Dated?			
2. Typography and Graphic Design			
A. Use of color - purpose			
B. Use of italics for emphasis			
C. Use of boldface type for emphasis			
3. Chapter Organization			
A. Use of subheads			
B. Other forms of division			
C. Study questions, guiding questions, or statement of purpose (focus)			
4. Stylistic Dimensions			
A. Organization and/or structure discernable			
B. Important concepts/ideas given superordinate positions and are identifiable (signals)			
C. Embedded questions (rhetorical?)			

Table I (Cont.)

Criteria	Yes	No	Description or Commentary
D. Abstract ideas/terms linked to concreteness: (1) Personal (2) Situational			
E. Use of comic relief, or cartoons, comic narratives to illustrate or clarify concepts/ideas			
F. Vocabulary or new/important terms are clearly identified:			
(Presentational format) (1) listings (2) bold type			
(3) italics (4) colored art			
(5) marginal notations			
(6) through context only (infer)			
(7) through content with imbedded definitions, explanations			
(8) other (specify)			

Additional Comments:

Table 1 (Cont.)

III. Adjunct Aids/Materials

Criteria	Yes	No	Description or Commentary
1. Learner - Oriented			
A. Marginal notes:			
(1) Footnotes			
(2) Pronunciation helps or guides			
(3) Illustrative materials			
B. Introductory statements with guiding questions:			
(1) Units			
(2) Chapters			
C. Guiding pre-questions are followed up with items/activities conceptually or ideationally consistent:			
(1) Unit level			
(2) Chapter level			
D. Post-questions provide for different tasks (skills) and operations (processes)			
2. Teacher-Oriented			
A. Provides guide, manual, suggestions to assist in using applicable approaches/procedures for assessment			
B. Provides suggestions for alternatives for different groups of learners			
C. Provides pre-and/or post-learning evaluation techniques to assist in selecting most appropriate materials, resources, activities			

Additional Comments:

of these assumptions is not met, or if the evaluator anticipates that they will not be met, then the prescriptive properties of the check list become evident: An area or a feature the teacher or learner may need to compensate for through some form of mediated instruction is clearly defined.

The check list in Table 1 is divided into three sections: Format Features, In-Text Aids, and Adjunct Aids/Materials. The inclusion of the evaluative category entitled Description or Commentary is intended for both objective and subjective statements concerning the target criterion. This system of recording was found to be more advantageous than the typical rating scales reported on similar check lists.

The division of the instrument into three sections is intended to cluster conceptually related criteria. The Format Features section, for example, catalogs text components that essentially describe the physical layout of the book. Many of these components are directed at either assisting the learner in locating information or providing him/her with an overall sense of the macrostructure of the content as organized and presented by the author(s). Individual criteria include features based on syntheses of recommendations from the work of Ball (1976), Krause (1976), Jevitz and Meintz (1979), as well as this author's investigations involving middle grade through community college level students, instructors, and materials (Thomas, 1978).

In-Text Aids provides for an analysis of features that may be viewed as integral parts of the content presentation. Many of these criteria address how the content is presented with focus on stylistic dimensions that may influence, either positively or negatively, content acquisition. Individual criteria in this section are based on recommendations made by Nelson (1978) and Campbell (1979) as well as the research findings of investigations in learning from prose conducted by Meyer (1977), Bartlett (1978), Brandt (1978), and Swanson (1979).

The Adjunct Aids/Materials section includes various featural devices intended for teacher and learner which are essentially adjuncts to the actual presentation of content. A number of the criteria subsumed under this section emerge from the research areas of adjunct questions, advance organizers, and cognitive organizers. Of seminal importance here is the potential effects that these adjuncts may have on shaping the text processing behavior of the learner. The most notable contributors to the characteristics listed in this subsection of the instrument are: Ausubel (1960, 1963), Frase (1967, 1968),

Rothkopf (1970), Anderson and Biddle (1975), Rickards (1976), Faw and Waller (1976), Mayer (1978), and Vacca (1978).

This instrument was developed in order to synthesize findings from empirical studies and to organize it in some systematized format that would allow researchers and teachers to make practical use of it.

Phase II

The second phase of analysis involves the assessment of readability characteristics and parameters. Instead of the limited passage sampling generally recommended to attain an average estimate of an entire text, the type of analysis suggested requires a much more rigorous and extensive sampling procedure. A comprehensive, stratified random sampling procedure is recommended, modified on the basis of work by Bradley and Ames (1977). A minimum of three samples per text chapter should be included.

The variance in content texts has been demonstrated (Ames & Bradley, 1978; Vaughn, 1976). It is important to determine how much variability exists and where. This knowledge allows the drawing of inferences regarding the probable effects of shifts in difficulty as the reader encounters the text in successive learning activities. As such, comparative analyses of intra-chapter, inter-chapter, intra-unit, and inter-unit differences are made. The choice of which readability procedure to use is not a particularly crucial point, as long as the evaluator realizes the limitations of a given formula and the differences among the various formulas available (Vaughn, 1976).

Table 2 is an example of the data provided by this rigorous sampling procedure. Note the sources of variance depicted. As is easily seen, the book estimate and the unit estimates are virtually identical. However, at a chapter level of inspection it is quite apparent that there is considerable fluctuation both within and between chapters, at least in terms of the surface features of prose upon which these calculations were made (Fry, 1977).

Based on this variance, it would appear that readers will experience marked differences in written text as they progress through the book. These differences may or may not result in problems for the reader, depending on the versatility of the individual. It is in this fashion that analysis of readability variance provides us with valuable prescriptive data.

Table 2

Readability: Intratext Variability

UNIT	I			II			III			IV		
CHAPTER	1	2	3	4	5	6	7	8	9	10	11	12
Sample 1	10	15	7	11	7	13	10	10	12	15	10	9
Sample 2	12	10	10	11	10	15	15	11	16	10	7	9
Sample 3	16	13	10	11	9	13	15	9	17	11	12	11
Chapter Ave.	13	12	9	11	9	14	13	10	15	12	10	10
Unit Ave.	11			11			12			10		

Book Ave.: 11

Formula : Fry (1977)

97

A Final Step

In an analysis of content material, it is imperative that someone who has "legitimate credentials" consider the validity of the body of knowledge included. Obviously then to complete the task of evaluation the cooperation and assistance of content area colleagues must be elicited.

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